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The Composite Whole

ALL OVER the country the men and women, boys and girls who fly for the fun of it are looking hopefully in the general direction of the new C.A.A. to determine the compass reading for the immediate future.

And the C.A.A., we understand, is fully cognizant of that surveillance and is determined to justify the hopes of the private flying group. How this is to be done, by what bureau or division or sub-authority, under whose direction and how rapidly, are questions that remain to be answered.

But the private flyers, having sat at the foot of the table with comparative restraint over a period of years, are hoping that the ration of sympathetic assistance will not give out before it reaches them. They realize, being capable of mature thought, that the airlines and other commercial flying activities must be given thorough attention, but they do not agree that such attention should be accorded to the complete ignoring of their own group.

The future of America's place on the air map of the world is not with any one group. The airlines themselves will not insure it, nor the armed services, nor the smaller commercial operators, nor the schools, nor the state organizations, nor the private flying groups. It is a composite of the whole that will keep America moving forward in aviation, and that is the reasonable expectation of any fair-minded airman.

Private flying, non-scheduled as it is, does not expect the largest helping, nor the smallest, but it certainly does not expect an empty plate from the men with the ladle.

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Fair Price for Carrying Air Mail Is First Job—Hinckley

FEEDER AIR MAIL MEETING OCT. 6

Conference at Kansas City Sponsored by Southwest Aviation Conference and Chamber of Commerce

Kansas City, Mo., Aug. 25—A National Air Mail Feeder Conference will be held here Oct. 6 to 8 under auspices of the Southwest Aviation Conference and the Kansas City Chamber of Commerce. Its purpose will be to organize a national campaign to establish air mail feeder lines as a system covering the United States.

The invitation to attend the conference is general. Speakers will include civic leaders, aircraft manufacturers, airline officials and others who can guide the conference on the broad question of air mail feeder services.

Moss Patterson, president of the Southwest Aviation Conference, pointed out in his announcement that the enthusiasm for air mail service inspired by National Air Mail Week, particularly by the pick-up operations May 19 by some 1,700 private pilots, has not been organized for effective expression.

"We know of hundreds of commu-
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Western Spokesman



Robert H. Hinckley
Member of the C. A. A. Who Was
Honored at Salt Lake City Aug. 19

Western States Take Leadership for Air Development at Salt Lake C. of C. Fete

(Special Correspondence)

Salt Lake City, Aug. 20—Hailing the Civil Aeronautics Act as the "Magna Charta of aviation," Robert H. Hinckley, member of the Civil Aeronautics Authority, asserted here yesterday and last night that one of the first jobs of the Authority will be to determine a fair price for air mail carriage.

Mr. Hinckley was guest at a dinner given in his honor at the Salt Lake Country Club last night by the Chamber of Commerce. Forty men, most of them representing the full economic power of this important segment of the West, gathered to pay tribute to "one of our own," hear him speak informally on the scope and purposes of the CAA, and impress upon him the west's need for sound and extensive aviation development.

In a sense it was one of the most significant aviation gatherings ever to be held in the West—significant because the West has consistently taken the leadership in supporting and expanding air transport and general aviation development. It was significant because "Bob" Hinckley, while rarely in the headlines, has been a power throughout the western states—and it was significant because gathered at the Country Club last night were men who have had much to say about the federal government's policies since 1933.

There was no mistaking the tenor of the discussions—that the West wants air transport placed on firm economic foundations with reasonable rates in order that it may expand rapidly to provide the West with much more frequent and much more extensive scheduled air line and air mail service.

The true attitude of the New Deal toward business is typified in the Civil Aeronautics Act, Mr. Hinckley said:

"The aviation industry asked for this law and worked for it. It was so written that it gave far more to aviation than the industry itself had anticipated.

"And that is a beautiful example of the present administration's real attitude toward business.

"The Civil Aeronautics Authority is destined to put the industry on the firm foundation it should have in America."

To newspapermen earlier in the day,

Publication of Volume of Aviation Poems by Gill R. Wilson Announced

It is with pride and pleasure that the publishers of AMERICAN AVIATION announce a forthcoming volume of aviation poems, "Leaves From An Old Log," by Gill Robb Wilson, State aviation director of New Jersey, who made his debut in this magazine last issue with a poem on Corrigan's flight, "The Road to Baldonnell," and is represented elsewhere in this issue with "Round Up," a poem which is centered on the Cleveland Air Races.

The volume "Leaves From an Old Log" will be published in a first and limited edition, with de luxe binding, about Sept. 1, with later editions to be in simpler style, and available for sale to the general public. The first edition can be obtained by subscription only, as it will be a collector's treasure, numbered, and autographed by the author.

The poems run the gamut of human emotions as involved in the colorful, gripping, sometimes grim and sometimes humorous business of flying. They deal with the war birds, the transport pilots, the mechanics, hostesses, racing

pilots, sunrise, blue sky, and mountains as viewed in flight. Weather, gas tanks, radio, vie with the famous names in aviation for reader interest.

The author's life has given him a wealth of material from which to draw these rhymes. Born of Scotch-Irish parents, Gill I. Wilson, D.D. and Amanda Robb, in Clarion county, Pennsylvania, Sept. 18, 1893, he graduated in turn from Kiskiminetas Preparatory School, Washington & Jefferson College, and Western Theological Seminary. Missionary work in W. Va. logging and mining country in vacations led him to be a Presbyterian clergyman, as his father had been, at Wierton, W. Va. in 1916 when he resigned to go to France. There he was a member of the French Ambulance Corps, went to aviation schools at Tours and Clermont, machine gun school at Gondrecourt, served with French Escadrille 66 and American Squadron 163. He held ratings as pilot, R.M.A. instructor, aerial gunner, and observer.

(Continued on page 2)

he told of the tremendous task of "organizing an I.C.C. for aviation" and said:

"Our job is simply to save, preserve and foster the aviation industry. Just like any other new industry it was destroying itself with unwise competitive methods. The board has the authority to prohibit such practices and is resolved to do so."

The board considers reckless bidding for air mail franchises one of the most harmful of these practices, he said. In the competition for franchises, some lines had lowered their bids so far as to offer free service. One of the first jobs of the Authority, therefore, will be to determine a fair price for air mail carriage.

Mr. Hinckley said the Authority was "surprisingly harmonious considering the gravity of its problems." It was also clear from his remarks that he considers the improvement of airports and the reduction of airplane accidents to be of prime importance in the Authority's program.

Having definitely placed the West on record for aviation development, particularly with regard to fair air mail compensation, it was obvious from discussions that those attending the dinner were in full accord.

The fete for Hinckley was staged by Marion C. Nelson, president of the Salt Lake Chamber of Commerce, and Gus B. Bachman, manager of the chamber and a member of the executive committee of the Interstate Airways Committee.

The West's business interests from Omaha to San Francisco and from Canada to Mexico were represented. Among those present were Marriner S. Eccles, chairman of the board of the Federal Reserve System who, like Hinckley, is from Ogden, Utah; Orval Adams, president of the American Bankers Association; John Fitzpatrick, publisher of the Salt Lake City Tribune; leading bankers, business executives and aviation officials.

WILSON

(Continued from page 1)

Returned from the War, Wilson again took up clerical duties, and served at historic Old Fourth Church of Trenton, N. J. from 1921 to 1931, when a throat affliction, brought on by war wounds, forced his resignation. He had spun in once from about 3,000 meters height when his plane had structural failure.

Undaunted, he learned the sign language and dictated his work for many months. He was National Chaplain of the American Legion for 1927-28. He has done scenario writing for motion picture films; received the Trenton Civic Award for Distinguished Civic Service in 1928; served eight years with the Air Corps Reserve, and was for eight years on the Adjutant General's staff, attached to the 119th Obs. Squadron of the New Jersey National Guard.

Wilson holds the French Croix de Guerre, the N. J. Distinguished Service Cross, and has 5 stars on his service bar.

He has owned and flown a number of private aircraft, and has flown over the U. S. and Europe many times. He is a member of the Quiet Birdmen, Former Pylon Club, Sportsman Pilots, is a past vice president and New Jersey governor of National Aeronautic Association, and a past president of National Association of State Aviation Officials. He has been state director of aviation for New Jersey since 1931.

He served as a member of the U. S. Department of Commerce Advisory Committee 1936-7, was technical consultant to the Bureau of Air Commerce

on lighter-than-air craft; made a national airport survey with a government group in 1937; and crossed in the *Hindenburg* to study airports and airship bases in Europe in 1936.

A pioneer foe of federal and state taxes on aviation gas, Wilson has contributed much to many phases of aeronautic development. In his opinion, "The frontiers of transportation belong to flight."

AIR MAIL MEET

(Continued from page 1)

nities that saw air mail planes land for the first time on their airports or flying fields who are now eager for this same service to be scheduled as a daily operation," Mr. Patterson said. "If enough citizens make known their desire for such mail service now, while candidates are campaigning for election to Congress, then we can count on a greatly increased delegation of friends to aviation to make their influence felt in the deliberations of our next Congress," Patterson said.

Inquiries as to details of the program or objectives are being handled by the secretary of the Southwest conference, C. R. Mooney, secretary of the aviation committee, Chamber of Commerce, Kansas City, Mo.

Navy to Use Diesel Aircraft Engines for Cruiser and Battleship Planes

In a new broad policy adopted recently by the Navy Department, Diesel aircraft engines are being developed to replace gasoline-fueled engines for service aircraft attached to cruisers and battleships, it was learned Aug. 18. It is the intention of the Navy to eliminate all gasoline fuel from cruisers and battleships as a safety measure.

Admiral Arthur B. Cook, chief of the Navy's Bureau of Aeronautics, confirmed the fact that the Navy is encouraging the development of Diesel aircraft engines, but said this development was concentrated on 500 to 600-hp. engines only for the service type of aircraft attached to cruisers and battleships. The new policy does not affect the Navy's chief air force attached to aircraft carriers. Admiral Cook expressed the belief that Diesel engines could not replace the high-performance gasoline aircraft engines powering the Navy's fighting aircraft.

Both Pratt & Whitney and Wright experimental Diesel engines have been undergoing tests and development work at the Langley Field laboratories of the National Advisory Committee for Aeronautics and considerable progress has been unofficially reported.

The service type of aircraft which will be affected do not require high performance as they have slow landing speeds and are catapulted from the ships. There are usually only six or eight planes attached to cruisers and battleships and they are used principally for scouting, observation and communication with bases, although they are all equipped with guns.

It is believed that the use of Diesel engines for these planes will eliminate a fire hazard in time of attack since a direct hit by an enemy on gasoline stores on cruisers and battleships would cripple them and result in damaging explosions. Diesels would also eliminate fire hazards on the aircraft themselves. The Germans have used Diesel engines in aircraft for some time and have led the world in their develop-

CAA Member to Speak at Northwest Council

Medford, Ore., Aug. 20—Edward J. Noble, chairman of the Civil Aeronautics Authority, has assured program officials that a member of the authority will speak at the meeting of the Northwest Aviation Planning Council to be held here Sept. 16-17, E. G. Harlan, general chairman, reports. The topic will be "Present Civil Aviation Authority and Future Legislation." Maj. Gen. Oscar Westover, chief of the Army Air Corps will speak at the luncheon Sept. 17.

The morning program Sept. 16 will be devoted entirely to a discussion of airports, with assurance of the presence of Richard C. Gazely, chief of the safety and planning division of the CAA, who will discuss "Needs and Classifications"; Frank Caldwell, of United Air Lines, Chicago, who will talk on "Location and Construction"; C. C. Hockley, regional director, PWA, Portland, Ore., speaking on "How PWA Can Cooperate with Hangar and Airport Construction." Those who will speak on private flying topics include Louis A. Wasmer, Spokane; Dr. Paul Sharp, chairman of the Oregon State Board of Aeronautics; Harry Coffey, Oregon governor of NAA; Charles Smith.

C. B. Allen Named Press Consultant to Aviation Authority

Carl B. Allen, aviation editor of the *New York Herald Tribune*, was appointed on Aug. 25 to serve for three months as consultant to the Civil Aeronautics Authority in the development of its information and public relations policies. He will assume his new duties immediately after the National Air Races at Cleveland and has secured a leave of absence from his newspaper.

John Stewart, publicity man formerly with Roosevelt Field and the Fokker Airplane Co., was appointed press relations chief for the CAA at the same time. More recently with the Consumer's Council of the U. S. Coal Commission in Washington, Mr. Stewart has been with Erwin-Wasey Advertising Agency and is well known to aviation circles in the east. As London correspondent for the *New York Sun* in 1920 he launched the sending of the *Paris Herald* newspaper to London by airplane to insure early delivery, and as a reporter for the *Albany Times-Union* in 1910 he wrote his first aviation story on Glenn Curtiss's record-breaking 150-mile trip between New York and Albany.

Allen's appointment as consultant ended several weeks of discussions between the CAA and the well known aviation editor. He did not seek the post himself, but the CAA was eager to have him as its administrative assistant in charge of public relations. Allen refused more than a temporary appointment.

Allen has been aviation editor of the *Herald Tribune* since September, 1933. Previously he was on the staff of the *New York World Telegram*, having joined that paper after its purchase of the *New York World*, on which he served for ten years. He has covered many of the nation's big aviation stories since the Army's round-the-world flight in 1924. He learned to fly in the Army during the World War and still maintains his status as an active pilot, holding a captain's commission in the Air Corps Reserve and a commercial pilot's certificate.

Of all the present divisions of the CAA, the information division will be most expanded and shifted. One of those being asked to serve in the division is Miss Patricia O'Malley, publicity chief in New York for American Airlines, and it is expected that she will accept.

P
A
S

WE have under development several interesting new projects, including:

- I. Assisted take-off for aircraft.
- II. Retractable three-wheel landing gear.
- III. Beryllium alloys.
- IV. High speed rotary wing aircraft.

Being thoroughly familiar with the patent and design situations concerning these developments, we will gladly assist manufacturers and individuals in their production.

The industry is invited to consult us on these and other engineering matters.

WRITE—WIRE—PHONE

PENNSYLVANIA AIRCRAFT SYNDICATE, LTD.

E. BURKE WILFORD, Pres.

Wilford Building, 33d & Arch Streets, Philadelphia, Pa.

P. O. Advertises for Bids on 878 Miles of Experimental Mail Routes

Bids to Be Opened Sept. 15 on Routes in Pennsylvania, West Virginia and Ohio; Pick-Up Mail Device is Required

Advertisements for bids on 878 miles of experimental air mail service, to be established in Pennsylvania, West Virginia and Ohio, were issued by the Post Office Department on Aug. 15. Bids will be received in the office of the First Assistant Postmaster General until 12 o'clock noon on Sept. 15 and contracts will be awarded for one year.

Because many of the towns on the routes do not have airports, the Post Office specifically states that the aircraft used must be equipped with pick-up and delivery devices. However, the P. O. does not specify what type of device is to be used, merely stating that it must have "the approval of the Bureau of Air Commerce, or its successor before the contract is awarded."

By neither setting up specifications for the pick-up and delivery device nor naming a minimum payload, the P. O. leaves the competition wide open, even making it possible for autogiro operators to submit bids. Autogiros with a 500-lb. payload could operate the routes very successfully, stated Charles P. Graddick, superintendent of U. S. air mail service.

The advertisements were made possible by the experimental air mail bill (H. R. 7448) passed at the last session of Congress, and an authorization of \$100,000 contained in the second deficiency bill.

One route of approximately 465 miles will be flown entirely in Pennsylvania, extending from Philadelphia to Pittsburgh via West Chester, Coatesville, Lancaster, Columbia, York, Hanover, Gettysburg, Chambersburg, Mount Union, Huntingdon, Altoona, Tyrone, Clearfield, DuBois, Ridway, Kane, Warren, Corry, Titusville, Oil City, Franklin, Grove City, Butler and New Kensington. One round trip daily except Sundays and holidays will be authorized, but the P. O. may require daily service if necessary.

The other route, of approximately 413 miles, will be operated from Pittsburgh via Irwin, Jeannette, Greensburg, Latrobe, Mount Pleasant, Connelville and Uniontown, Penna.; Morgantown, Fairmont to Clarksburg, W. Va.; and from Clarksburg via West Union, Saint Marys, W. Va.; Marietta, Ohio; Parkersburg, W. Va.; Pomeroy, Ohio; Point Pleasant, W. Va.; and Gallipolis, Ohio, to Huntington, W. Va., and from Huntington via Barboursville, Milton, Hurricane, Nitro, Dunbar, Charleston, Spencer, Grantsville, Glenville and Weston to Clarksburg. The frequency to be authorized will be one round trip between Pittsburgh and Clarksburg, one one-way trip between Clarksburg and Huntington via Parkersburg, and one one-way trip between Huntington and Clarksburg via Charleston. Frequencies will be daily except Sundays and holidays.

Although the advertisements do not specify a maximum bid, it is believed that the P. O. does not intend to pay more than 20 cents a mile on the routes, primarily because of its limited appropriation.

The P. O. will not require the contractors to transport passengers, but the advertisement states that they "may also carry other traffic," provided that the mail is given preference at all times. Contractors will be required to receive and deliver the mails at the post offices at all exchange and terminal points on the routes, unless other arrangement is made satisfactory to the Postmaster General.

It had been the original intention of the Post Office Department to include

Harrisburg and Erie as stops on the routes, making it possible to feed mail to the trunk lines operating through those cities. This idea was abandoned, however, because of the increased mileage that would be required. The P. O. has reserved the right to increase the stops on the routes and these cities will probably be the first added.

Between 15 and 20 different proposed plans were considered by the P. O. before the routes were advertised. These particular lines were chosen because the terrain and weather will thoroughly test the feasibility of feeder routes, Graddick stated.

Although it was originally expected that Dr. L. S. Adams, president of Tri-State Aviation Corp. and inventor of the pick-up and delivery system, would be the only bidder, the P. O. states that much interest has been shown and that there will probably be several bids.

The P. O. is far from sold on the pick-up and delivery system, believing that most communities also want a regular passenger service. However, the system will be given a fair trial, Graddick stated, before any permanent policy is adopted.

CAA SECRETARIES

Three Chiefs Bring Former Secretaries With Them

Secretaries of the members of the Civil Aeronautics Authority and other chief staff members are:

Mr. Noble—Miss Katherine Foley
Mr. Branch—Miss Jean Clark
Mr. Hinckley—Miss Roseanna McQuestion
Mr. Ryan—Mrs. Catherine Streeks Russell
Mr. Mason—Mrs. Jane M. Davis
Mr. Hester—Miss Constance E. Adams

Col. Smith—Miss Kathryn Randall
Mr. Hardin—Miss Mabel L. Cuddy
Mr. Guthrie—Miss Mabel Robertson
Mr. Frizzell—Mrs. Virginia Schaffert
Miss Clark had been secretary to Mr. Branch at the Post Office Department, and Miss Adams has been Mr. Hester's secretary for several years at the Treasury Department. Miss Randall was Col. Smith's secretary at the WPA.

Air Mail Chief



W. W. HOWES

First Assistant Postmaster General, who on Aug. 22, added the supervision of the air mail to his many other duties following the resignation of Harlee Branch as Second Assistant Postmaster General. Mr. Howes directs the largest civil service government organization in the world, and prior to his elevation as First Assistant on Jan. 17, 1934, had charge of the air mail service while he was Second Assistant. A frequent patron of the airlines, Mr. Howes likes to fly and has taken pride in the new airport in his home town of Huron, S. D. "I'm pleased with the progress the airlines have made in the past five years," he said, "and I will do everything I can to encourage their development. I feel that the creation of the Civil Aeronautics Authority is a fine step forward, although the Post Office Department will naturally always have the say as to designation of air mail routing and schedules."

Piersol Resigns

James V. Piersol has resigned as aviation editor of *The New York Times*.

JERRY SASS HEADS SOUTHERN AIRLINE

Trans-Southern Airlines, Inc., Files Petition With CAA for New Route

Oklahoma City, Aug. 23—Formation of a new airline which seeks to operate a proposed route between Amarillo, Texas, and Memphis, Tenn., via Oklahoma City, was announced here today by Jerry Sass, president and general manager. The new company is called Trans-Southern Airlines, Inc., and a brief has been filed with the Civil Aeronautics Authority seeking a certificate of convenience and necessity.

The proposed route covers 616 miles from Amarillo through Elk City, Oklahoma City, Muskogee, Fort Smith and Russellville, Ark., and into Memphis. General offices, shops and main base would be at Oklahoma City.

The line proposes to leave Amarillo at 5:30 a. m. after arrival of TWA's ship from the west, arriving at Oklahoma City at 7:30, and arriving at Memphis at 10:30 a. m. The return ship would leave Memphis at 1:40 p. m. and arrive in Amarillo at 7:30 p. m.

Financing of the line has been completed, according to Mr. Sass, who is well known in the Southwest as a sportsman pilot and active in aviation affairs. Keith Kahle, editor of *Taxi-Strip*, regional aviation magazine and well known aviation writer in the Southwest, in vice-president. Kathleen Sultan Sass is treasurer, and W. C. Lewis, until recently U. S. attorney, will be legal adviser and is one of the incorporators. The line is desirous of obtaining an air mail contract.

Horner Recovering

Charles F. Horner, president of the National Aeronautic Association, was to return to his office about Sept. 1 after being ill with pneumonia since the middle of July.

Aviation Calendar

- Sept. 2-3-4—Aero Medical Association Meeting, Dayton, O.
- Sept. 3-5—National Air Races, Cleveland.
- Sept. 3-5—Fifth Annual Meet of Associated Gliding Clubs of New Jersey, Schley Field, Liberty Corner, N. J.
- Sept. 10-11—Cincinnati Air Show.
- Sept. 11—Annual Air Show, Denver.
- Sept. 11—Gordon Bennett Balloon Race, Liege, Belgium.
- Sept. 12-14—National Air Mail Feeder Conference, Kansas City, Mo.
- Sept. 12-16—Combined Meeting, Western Aviation Congress and Aviation section of 4th Annual Western Safety Conference, Los Angeles.
- Sept. 12-16—International Congress for Applied Mechanics, M.I.T. and Harvard University, Cambridge, Mass.
- Sept. 16-17—(Tentative) — Vermont State-Wide Air Tour.
- Sept. 16-17—Fifth Northwest Aviation Planning Council, Medford, Ore.
- Sept. 16-18—TWA Ranch Party, Santa Fe, N. M.
- Sept. 23-25—Annual Convention, New York State Aviation Association, Rochester, N. Y.
- Oct. 4-5—Tenth Anniversary of AIP Progress, Orlando, Fla.
- Oct. 13-15—Annual Meeting, National Association of State Aviation Officials, Omaha Air Carnival, Omaha, Neb.
- Oct. 28-29—National Rotating Wing Aircraft Meeting, sponsored by Philadelphia Chapter, Institute of Aeronautical Sciences, at Franklin Institute, Philadelphia.
- Nov. 18-Dec. 4—16th Annual Aeronautical Show, Paris, France.
- Jan. 6—Midyear Meeting, Florida Aviation Association, Miami.
- Jan. 6-8—11th Annual All-American Air Maneuvers, Miami, Fla.
- Mar. 2-4—Southwest Aviation Conference, Fort Worth, Tex.

Round Up!

It's round-up time out Cleveland way
The Cheyenne of the sky!
It's frontier days for old top-hands
Whose range is heaven high!
It's branding time for gear and craft,
The maverick and colt,
So, Powder River! Let 'er buck!
Bring on your thunderbolt!

Against the fenceless 'kral of blue
Ten thousand horses fling
The sky-wise hand who forks their speed
Around the trackless ring!
Oh, men shall live or men shall die
But there is work to do,
So, On to Cleveland! Ride 'em boy!
You high range buckaroo!

Tomorrow's herd will wear your brand!
May your remuda grow!
Have pastures green and water fresh
Wherever chance may blow!
And if you win or though you lose
Old Hoss, Here's how to you!
You forked 'em if they could be forked,
You high range buckaroo!

GILL ROBB WILSON

CAA ACTIONS

I. C. C.—By executive order the employees of the Bureau of Air Mail of the I. C. C. were transferred to the CAA Aug. 22. Norman Haley, director of the bureau, and all other employees, were affected. Mr. Haley will head up the eighth division in the Authority.

AIRLINES—On Aug. 23 the CAA authorized continuation of three existing air transportation services pending the filing of applications for certificates of convenience and necessity and action by the CAA on such applications. These authorizations were for Pennsylvania-Central Airlines between Detroit and Sault-Ste. Marie; United Air Lines' stop at Monterey, Cal., and Western Air Express into Glacier Park. All three services were started after the grandfather clause date in the Act but for the reason that landing facilities had not been completed previously.

CERTIFICATES—The CAA on Aug. 23 announced that it had postponed until Dec. 20 the effective date of provisions requiring certificates of competency for new classes of airmen who heretofore have not been required to have such certificates. These include those in charge of inspection, maintenance, overhauling or repair of aircraft appliances. More time is required for setting up examination and certification procedure.

MAIL—The CAA on Aug. 20 postponed the effective date of provisions in the new Act which repealed certain phases of the Air Mail Act of 1934 pertaining to credit mail trips until the CAA has had time to review air mail rates. Credit mail will be carried as heretofore until further decision is reached.

APPLICATIONS—On Aug. 20 the CAA released the legal forms for making of applications for certificates of convenience and necessity not only for existing lines but for new companies and new routes. These forms may be obtained from the secretary of the CAA, Commerce Building, Washington, D. C. All applications filed with the CAA on Aug. 22 will have to be refiled in accordance with the new forms.

SCRIP—The CAA has extended to Oct. 3 the period in which "scrip" can be used on the airlines. The "scrip" tickets are blocks of tickets on which a regular user of air transportation is allowed a 15% reduction.

PASSES—The CAA has indicated unofficially that it will not modify in any slight way the rigid prohibition against complimentary trips on the airlines. Passes were abolished as of Aug. 22.

C. and S. Applies for Memphis-Houston Line

Chicago and Southern Air Lines, Inc., announced Aug. 26 that it had filed with the CAA an application to inaugurate air passenger service between Memphis, Tenn., and Houston, Texas, via Pine Bluff, Ark., and Shreveport, La. The company operates at present between Chicago and New Orleans. It is expected that Braniff Airways and Delta Air Corp. will also file for the same route.

MAY SHIFT GILBERT

Chief Accountant in P. O. Air Mail Section Considered by C. A. A.

Alfred H. Gilbert, chief accountant for the Post Office Department's air mail section, may be transferred to the Civil Aeronautics Authority, it is learned. The transfer is still tentative and no action has been taken by the C.A.A. to date.

Gilbert has been chief accountant in the air mail section since 1930, and has been with the Post Office since 1921. He devised the system of accounts used by the airlines and personally supervised its installation in the companies' offices throughout the country. Gilbert has traveled between 385,000 and 400,000 miles by air and has ridden on every U. S. airline.

CAA to Confer with Airline Heads in Endeavor for "Crashless Winter"

With hope of making the coming cold weather season a "crashless winter" for commercial aviation, the members of the Civil Aeronautics Authority will confer for two days with heads of the air transport industry at Chicago on Sept. 6 and 7 following the National Air Races at Cleveland.

The meeting was arranged by Col. Edgar S. Gorrell, president of the Air Transport Association, and Edward J. Noble, chairman of the Authority. It is expected that the transport heads will occupy most of the time in outlining their present problems to the CAA and in telling the CAA in what ways the

new federal regulatory body can aid the industry in eliminating accidents.

Participation in the closed conferences will be restricted to presidents and operations chiefs of the various companies, according to present plans. It is known that the CAA is anxious to have a perfect winter record. Some of the members, including Harlee Branch, believe safety to be the primary immediate problem facing the Authority and the industry. It is known that the Authority wants to do everything in its power to have a good winter record during the first year of its control over civil aviation.

Rotating Wing Plane Meeting in October

A National Rotating Wing Aircraft meeting, sponsored by the Philadelphia chapter of the Institute of the Aeronautical Sciences, has been tentatively scheduled at the Franklin Institute on Oct. 28-29. The two-day session will follow a regular meeting of the Franklin Institute on Oct. 27, at which time Dr. Alexander Klemin, professor of aeronautics at the Guggenheim School of Aeronautics, New York University, will lecture on that type of aircraft.

At the meetings, papers on this type of aircraft will be presented by various members of the industry. The committee in charge of arrangements is composed of E. Burke Wilford, chairman, A. E. Larsen, R. H. Prewitt, J. G. Ray, and R. H. McClarren. Aircraft and engine manufacturers, air transport operators, air clubs, the U. S. Navy and other interested parties, will be invited to attend in addition to representatives of the rotating wing aircraft industry.

A tentative schedule of lectures is as follows: Oct. 28, "Review of Rotating Wing Aircraft," "The Autogiro," "The Gyroplane," "The Convertiplane," "The Helicopter," "Private Flying and Roadability," "Agricultural Uses," "Military Uses," "Army Experiences," "Prospective Navy Uses," "Unique Uses."

On Oct. 29, following a session on research facilities and programs, the following topics will be discussed: "Performance Possibilities," "Super Speeds," "Autogiro Performance," and "Helicopter Performance." Government and industrial cooperation and technical development will be subjects at an open discussion.

OMAHA SHOW PLANS Airport Dedication, N. A. S. A. O. Meeting Scheduled for October

Omaha, Aug. 16—City council today approved plans for a celebration in October marking the completion of the \$1,750,000 Omaha Municipal Airport. An air carnival and show will be held at the new field on Oct. 15 and 16, and an aviation exposition is planned at the city auditorium during the week Oct. 9-16. Efforts will be made to bring Howard Hughes and Douglas Corrigan to Omaha as headliners.

The National Association of State Aviation Officials, which will be in convention here, will conduct the exposition, and Omaha Post 1 of the American Legion will sponsor the carnival and show. The NASAO meeting is expected to attract more than 350 aviation officials from all parts of the country.

PLAN LIGHTPLANE SHOW Chicagoans' Non-Profit Exhibition Sept. 25 Expected to Pave Way for Annual Programs

Chicago, Ill., Aug. 25—About 50 lightplane owners in this area will present a non-profit air show at Harlem airport Sept. 25 to demonstrate the performance possible with ships of less than 50-hp., it is announced here. The organizers, whose spokesman was Robert A. Morrow, 7252 South Maplewood Ave., hope to make the show an annual event.

"There is a lot of flying in the small ships," Morrow said, "but the owners don't know each other. And no one who flies a light plane ever enters a meet in which he'll have to fly against machines that outclass his own." Prizes are planned, although commercial competitions will be secondary. Pilots will compete in their own classes. Three sets of contests will be arranged for those holding transport certificates, for private flyers, and for student pilots.

4 Named for NACA; 4 Are Reappointed

President Roosevelt on Aug. 17, in accordance with the terms of the Civil Aeronautics Act, appointed four new members to the National Advisory Committee for Aeronautics, and reappointed four members who were already serving.

The new members are Edward J. Noble, chairman of the Civil Aeronautics Authority; Clinton M. Hester, administrator of the Authority; Vanevar Bush of Massachusetts, and Jerome Hunsaker, also of Massachusetts. Col. Charles A. Lindbergh, Dr. Orville Wright, Dr. Edward P. Warner, and Dr. Joseph S. Ames were reappointed. The four new members took the places of Dr. David W. Taylor, Dr. William P. McCracken, Harry F. Guggenheim, and Denis Mulligan.

The Civil Aeronautics Act provided that terms of all NACA members not representing government agencies should expire on August 22 and that thereafter appointments should be for five years instead of for an indefinite period.

Dr. Ames, reappointed chairman of the NACA, has been a member of the Committee since 1915. Dr. Orville Wright has served 18 years.

Name Field for Corrigan

Galveston, Tex., Aug. 20—City officials have decided that the municipal airport here will be named for Douglas Corrigan when the flyer visits this city. Raymond A. Stewart, city commissioner, and J. G. Howard, secretary to the mayor, have been named to work out plans for the reception.

Logan Leaves TWA for Post with American



A. Martin Logan

A. Martin Logan, national executive representative for TWA for the past fourteen months, resigned Aug. 23 to accept a position as executive representative and assistant to the president of American Airlines, Inc. In his letter to Jack Frye, President of TWA, Mr. Logan said he was leaving the company with reluctance.

For American Airlines, Mr. Logan will handle Washington affairs in addition to other duties which will take him around the country on frequent trips. He will have his own office and staff in Washington, representing his company in matters coming before government agencies. Mr. Logan is one of the best known airline executives in the national capital and actively aided the airlines at the last session of Congress during passage of the Civil Aeronautics Act of 1938.

Logan came to TWA in July, 1937, from Philadelphia where he was manager of the General Air Express division of the line. His aviation experience started in 1930 when he organized Great Atlantic Airways in New York City which proposed to operate a trans-Atlantic service. He has been active in aviation affairs in Philadelphia and Pennsylvania.

Vermont Tour—Show Set

Burlington, Vt., Aug. 13—Vermont's state-wide air tour is tentatively scheduled for Sept. 16-17, it has been reported here. Tourists will finish at Barre-Montpelier airport to witness an air meet and show sponsored by the Barre unit of the Vermont National Guard.

Set Western Conference

Los Angeles, Aug. 15—A combined meeting of the Western Aviation Conference and the aviation section of the 4th annual Western Safety Conference will be held here Sept. 12-16, Col. R. B. Barnitz, aviation section chairman, announces. The program, still tentative, will include topics on aircraft manufacturing, airport equipment, air traffic control, weather reporting, transport operations and private flying.

Mark Wright Birthday

Twenty-five cities observed Orville Wright Day Aug. 19 in observance of the 67th birth anniversary of the noted aviation figure. Sponsoring the project was the recently organized Association of Men With Wings, seeking the return of the original Wright plane from London to the United States. Cities with ceremonies included Pittsburgh, Boston, Cincinnati, Birmingham, Baltimore, Akron, Richmond, St. Petersburg, Buffalo, Phoenix, Lexington and Pawtucket.

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CONTINENTAL 50 MOTOR IMPROVES
COOLING AND STREAMLINES APPEARANCE**



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Oregon Challenges Washington

Can the Federal Government Keep Uncertificated Aircraft Off the Civil Airways When Flying Intra-State? A State Official Who Befriends "the Forgotten Private Flyer" Poses Some Questions

By Allan D. Greenwood, Inspector
Oregon State Board of Aeronautics
Portland, Oregon

EVERYONE agrees that the aviation industry must be regulated to some degree. Any arguments arising about aviation regulation should be based on the limit to which regulation should extend, and as to whether regulations should be applied by Federal or State governments.

The Oregon State Board of Aeronautics is known as the oldest regulating body in the aviation industry. It first adopted regulatory laws in 1921. These laws were very simple in form and provided for the issuance of licenses both for pilots and aircraft. The need for regulation was foreseen by Oregon boys who had flown in France during the War and who had returned home to continue flying commercially. This same group was of the opinion that regulations applying to the operation of aircraft should be local in nature so that arguments for suggested changes, as they applied to aviation in our State, could be heard by a Board, which would be within the easy reach of any resident of Oregon.

During the years from 1921 to 1926 other States were slow to follow Oregon's example of setting up a Board for aviation regulation, consequently in 1926 Congress passed a law called the Air Commerce Act of 1926, giving to the Secretary of Commerce the authority to license aircraft and pilots and to regulate the aviation industry as it pertained to inter-State commerce. This, as I said, was largely due to the fact that it was difficult to get forty-eight States to act in unison in such a short time. Uniform regulations at that time were certainly needed. In the meantime, however, a number of State regulatory bodies had been created to govern intra-State air commerce and the Department of Commerce urged that such bodies be created to plug the loop hole in the Federal law which existed as far as intra-State operations were concerned. Our State cooperated with the Department of Commerce seeking to find a common ground on which practical regulation could be established over a new and rapidly growing industry.

I am going to confine my remarks from here on largely to regulations as they now apply to Oregon, as of course, I am more familiar with that subject.

Licenses Amateur Planes

Until 1931, Oregon issued a commercial aircraft license and commercial pilot's license as well as an amateur builder's certificate for aircraft built by young men who were eager to experiment with their own ideas and at their own expense. Oregon also issued a private or amateur license similar to our present day private pilot's license. In 1931, in a spirit of cooperation, the Oregon Legislature turned over to the

Federal Regulation vs. State Rights

Late in July a group of pilots held their fourth annual air meet at Springfield, Oregon. In open defiance of the federal Civil Air Regulations, uncertificated aircraft participated in the meet—directly on a U. S. civil airway. Noteworthy feature of this defiant gathering was its sanction by the Oregon State Board of Aeronautics.

Departing from its policy of not publishing signed articles, AMERICAN AVIATION opens its columns to Allan D. Greenwood, inspector for the Oregon State Board of Aeronautics, to present the views of a state official on federal air regulations. Are the Civil Air Regulations constitutional? Just how far can the federal government go in controlling the airways? What is the dividing line between federal and state regulation? Can the federal government restrict the flying of uncertificated aircraft within a state? These are vital questions and have become highly important when a state officially challenges the right of the federal government to control flying over certain areas of a state. Comments are invited from readers.

The author has been flying since he was 17. He is now 30. At 18 he was the youngest U. S. transport pilot. He has engaged in barnstorming, charter flying, forest patrol, and in 1932 taught 36 Chinese boys to fly for the Chinese government in Portland. These pilots are now the backbone of the Chinese Air Corps. Greenwood has 2100 hours of flying to his credit, his hobby is hunting "anytime, with anybody, for anything," and has been inspector for the Oregon board for three years."



Greenwood

Federal government the responsibility of licensing commercial aircraft and commercial pilots. However, Oregon retained the right to license amateur built planes and amateur flyers who wished to fly planes they built themselves. This was in line with the thought which has existed to date, that the Federal government had no control over intra-State flying. This year with the adoption of the new CAR which included regulations that—

- (1) All aircraft should be certificated by the BAC.
- (2) That the Federal government has taken over certain areas of airspace surrounding airports and within a radius of ten miles of a line drawn between two airline terminals.
- (3) Further, providing that no uncertificated aircraft (State licensed aircraft) could fly on or across such an airway—The Federal government has assumed that it can control intra-State flying.

By carefully reading the above regulations, one can easily see that it is impossible for State licensed aircraft to fly across the lands or waters of any State in the United States without flying on or across a so-called "Federal" airway, or in other words, without violating Federal regulations. Anyone violating such regulations at the present time is subject to a fine to be assessed by the Regulation Division of the CAA, which can impose a lien against that person's aircraft. Any person so fined has recourse only to a Bureau which has headquarters in Washington, D. C.

Questions Constitutionality

No opportunity was given before

these regulations were applied to the industry to discuss them or their merits. Recent Supreme Court cases lead us to believe that any Federal regulations adopted without due hearings for the persons affected are unconstitutional. But aside from the legal basis of the argument, I would like to point out some interesting sidelights of the regulations and what the restrictions which they place on flying will mean to our State. I intend to deal mainly with the amateur builder and the private flyer.

As stated before, the Oregon State Board of Aeronautics adopted the policy of encouraging amateur building with the thought in mind that there are thousands of young men in the United States who have worthwhile ideas which could advance the science of aviation if they were allowed a free hand in developing their own ideas. Like thousands of aviation enthusiasts in this country, I believe the Federal government makes a fatal mistake in prohibiting experimental work by private individuals. Few basically new ideas ever come out of academic drafting rooms.

The first successful ship was built by a couple of country tinkers in an Ohio village, and 90 per cent of the progress in design since then has been the work of similar men. If these men had been under restrictions such as we have now, we would have no aviation industry. Twenty-five years ago Bill Boeing was puttering around in a shack on Lake Washington. Glenn Curtiss was revamping motorcycle motors at Hammondport. Clyde Cessna and Glenn Martin were doing the same in the

Middle West. If these men were to try doing the same thing today, they would promptly have their equipment confiscated. As it stands today, any amateur who has new ideas on aircraft design has to run the risk of prosecution in order to try them out.

Experimental Ships

Working under such handicaps does not lead to much advancement. But in spite of all, a great deal of fine work has been done. Bernard Pietsenpol has spent years in developing the Ford motor to a high stage of perfection and his ships and motors are flying all over the world. George Yates of Oregon has developed a type of construction for both airplane wings and fuselage that bids fair to make a great step in structural safety and low cost. Les Long of Cornelius has designed many experimental ships and propellers and some of his propeller designs are now used in many popular low priced planes. Con Ellingston of Great Falls, Mont., has developed a ship with telescoping wings which has attracted nation-wide attention. However, it is not the technical progress so made that is the only result of amateur building.

No science or art can advance without public interest. If we are to have an air-minded and flying public we must give them something to arouse their interest. Two hundred men in Oregon are now amateur builders, owners or pilots who would not have been interested if it had not been for the experimental work they had been allowed to do here. From a standpoint of the number of private planes and the number of hangars on a field, one of the largest airports in the Northwest is Bernard's Airport at Beaverton, which has 24 hangars and 28 amateur-built planes. Besides our Oregon boys, there are no doubt, thousands of others who would become interested if they were allowed to carry on this experimental work in all parts of the United States. There is no doubt whatever about the value to the Nation of experimental and private building and flying. I sincerely believe that in time of war a pilot who has designed and built his own airplane and learned to fly it, would be a better pilot than one who has had 90 days training in a military school. The same applies to mechanics. I think the best example of how this works out is the radio parallel.

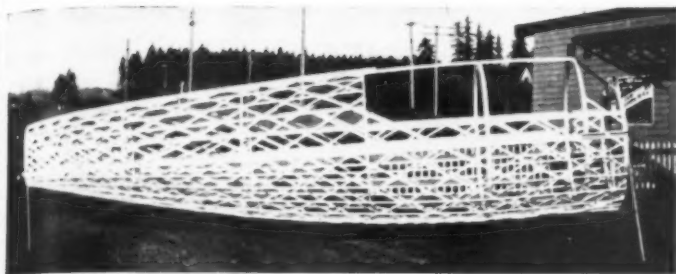
Proposes Solution

Up until 1912 radio amateurs had their own way and radio grew fast. At this time the same sort of group that now controls the aviation industry took charge and the amateur was practically removed from the picture. He was restricted to the then unusable wave length of 200 meters and allowed only limited power. The result is history. The amateur took the unwanted wave length and soon made it the most valuable

MENASCO

GIVES LIGHT PLANES A STOUT HEART

50 H.P.



Oregon encourages the building of airplanes by amateurs. Typical of this construction is the ship shown above in process of construction by George Yates. It has just been completed. Of wood construction, it utilizes the geodetic or basket weave design of wings and fuselage. It is the third ship of this series to be built in Oregon, the first one being woven out of metal. The state believes amateur builders bring forth many valuable contributions to aviation in new aircraft construction methods and designs and gives these builders free rein within the confines of the state. Because the federal government prohibits uncertificated aircraft from flying on civil (federal) airways, the state is challenging this authority.

able wave length used. When the World War came they were the backbone of the Army signal corps and have since been the designers and builders of practically all radio improvements. And so, granting that the amateur does have a place, here is what I believe should be done about him.

- 1—The above quoted CAR should be amended immediately.
- 2—Amateur and experimental flying and building should be under State control.
- 3—All State laws should be uniform or reciprocal.
- 4—All State laws should interlock with Federal regulations and private or experimental work must be kept non-commercial. Commercial aviation is vital and must be protected.
- 5—The officials of each State's aviation control must have both the right and the ability to pass upon the safety of any aircraft used.
- 6—Private experimentation should be encouraged by both the State and Federal governments.
- 7—Technical aid should be available to those who can show promising developments.
- 8—The rights and privileges of military and commercial aviation must come first but the demands for such rights must be within reason. Efficient cooperation between State and Federal officials can make this entirely practical.
- 9—Minor regulations should cover the licensing of ships and pilots by both the State and Federal governments.
- 10—All licensed aircraft, either State or Federal should be inspected at regular intervals of not more than six months.
- 11—No alteration should be allowed except under adequate supervision.

Federal Tests Costly

With the above thoughts in mind, I would like to point out that with the creation of the BAC in 1926, the Federal government has taken the consistent attitude that amateur aviation has no place in the scheme of things. The tendency of the Bureau has been to keep tight control upon building and flying

within its own hands and what was largely intended to be regulation has now become nothing more than prohibition. As far as amateur flying is concerned, this state of affairs has now reached the point where it is a civil offense to build an experimental airplane and try to fly it. The government does not admit this, but on the contrary claims that all they ask is that any aircraft built, be turned over to them for tests as to its safety. While this looks all right on the surface the cost in time and money for such a test is completely out of the reach of the ordinary citizen. We can definitely prove from the record of amateur-built airplanes in Oregon and other parts of the country that no expensive airworthiness tests are necessary if ships are limited in size to light planes.

We have a new deal now in the aviation industry with the coming of the CAA. As one who has spent more than 12 years actively engaged in the aviation industry as pilot, owner, operator, amateur builder and inspector, I sincerely hope that the men who have assumed the tremendous responsibility of guiding the destiny of aviation in this country will investigate with an open mind the possible benefits of amateur building and private flying to this Nation and the industry. If they will but do this, those of us who are interested in amateur building and private flying are not afraid of the result. We stand ready and willing to cooperate, as we always have in the past, and like the members of the new CAA, who are charged with the responsibility of promoting aviation, we are interested only in one thing—the greatest possible advancement of the science of Aeronautics.

I have tried to set up as briefly as possible a few thoughts that I have on this subject. It may be of assistance to have someone head a movement to bring about a change in the present regulations to the end that the regulations would be redesigned to encourage amateur building. I will be only too happy to do what I can to foster such an organization and will be more than pleased to hear from anyone who has additional or similar thoughts along this line.

CAA FORMALLY ASSUMES CONTROL

Takes Over Functions Aug. 22 and Works Fast; Members to Visit Air Races

At 12:01 a. m. Monday, Aug. 22, the Civil Aeronautics Authority assumed control over civil aviation in the United States as the Civil Aeronautics Act of 1938 became legally effective.

By executive order the personnel, records, funds and activities of the Bureau of Air Commerce of the Department of Commerce, and of the Air Mail Bureau of the Interstate Commerce Commission, were transferred to the new independent federal agency. Thus the Bureau of Air Commerce established under the Air Commerce Act of 1926, formally passed out of existence.

More than 3,000 employees of the two bureaus were affected by the transfer. Until permanent quarters are obtained the CAA will have its main offices in the Commerce Building, while two divisions were moved into temporary space in the Garfinkle Building, 14th and G Streets, a few blocks away.

The five-man Authority moved swiftly to cope with immediate problems and issued a number of official orders. Members of the Authority are: Edward J. Noble, Chairman; Harlee Branch, vice-chairman; Oswald Ryan, Robert H. Hinckley, and Grant Mason. The administrator is Clinton M. Hester, the general counsel Charles Stewart Guthrie, and the secretary Paul J. Frizzell.

Working in complete harmony and as a unit, the Authority spent the bulk of its time in formal meetings. On the afternoon of Aug. 22, the members held a reception for their employees and will spend several more weeks perfecting their organization.

On Aug. 19 Mr. Hester went on his first trip into the field with a number of the division chiefs and visited airports between Washington and Long Island, stopping at Newark to inspect the control tower and field operations. He was accompanied by Byran Jacobs, Charles Stanton, Richard Boutelle, Earl Ward and Benny Griffin, who piloted the CAA's Lockheed 12. At Newark Mr. Hester conferred with Lieut. Richard Aldworth, manager of Newark Airport.

The members and staff will attend the National Air Races at Cleveland Sept. 4 and 5 and will go from there to Chicago to confer with heads of scheduled airlines. Mr. Noble will take several members in his Stinson and the others will travel by scheduled airline.

Denis Mulligan, former director of the Bureau of Air Commerce, who previously had made known his intention to resign, left the Authority on Aug. 22, but will represent the CAA at the coming Brussels aeronautical air law conference in a consulting capacity. Grant Mason, member of the Authority, will also attend the Brussels conference. Mr. Mulligan will resume private law practice in New York this fall.

On Aug. 22 the two members of the Air Safety Board, Lieut. Col. W. Sumpter Smith and Tom Hardin, were sworn in by E. W. Tibbey, chief clerk of the Commerce Department. The third member of the board has not yet been appointed.

Boosts San Antonio

The San Antonio Chamber of Commerce has furnished Braniff Airways with tourist information on this city, for distribution on the company's planes.

LEARADIO

Will Announce Soon Another Important Development

A New Aircraft Radio Compass and Direction Finder

A unit which will at once meet the requirements of military, commercial and private flying

This new device will enable pilots to quickly and accurately resolve orientation problems

Augmenting the entirely new and secret feature involved will be such others as:

- Relative distance from station indicators
- A new precipitation static shielded loop antenna
- Wider tuning range
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- Low weight
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BEST OF ALL:

Unaffected in directional accuracy with mal-adjustment

Write for detailed information on the—

ARC-6 LEARADIO COMPASS

You'll see them on the most up-to-date, safest operating airlines soon

LEAR DEVELOPMENTS, Inc.
ROOSEVELT FIELD
MINEOLA, L. I., N. Y., U. S. A.

A complete aircraft radio sales, service and manufacturing plant

P. O. Changes Its Mind, Awards Brownsville Route to EAL for \$0.00

Surprise Decision Announced 5 Days Before CAA Takes Over;
Both Braniff and EAL Will Operate
Controversial Routes

In a surprise move five days before the Civil Aeronautics Act of 1938 became effective, the Post Office Department, reversing its own decision, decided to award on Aug. 17 the air mail contracts for the highly controversial Houston-Brownsville and Houston-San Antonio routes to Eastern Air Lines for zero (\$0.00) cents per mile.

The action was taken by W. W. Howes, First Assistant Postmaster General, who took over supervision of the air mail in his department on Aug. 8 following the resignation of Harlee Branch when the latter became a member of the Civil Aeronautics Authority.

By this action the Post Office Department reversed an earlier decision announced in a press release on July 12 not to award the contract. At that time the Department announced that it was turning over the problem to the CAA.

No release was issued by the Department on Aug. 17. Newspapers were telephoned by the P. O. press division and interested parties informed by wire.

The P. O. action came, it was said, because Eastern Air Lines had protested that the CAA could not rule impartially because Braniff Airways, the other line interested in the routes, had operated part of the routes with passengers and mail before the "grandfather clause" date under the New Act and therefore will automatically get a certificate of convenience and necessity.

Braniff Airways had no intimation that the contract was to be awarded. Tom E. Braniff, president, was en route to the west coast for a vacation with his family and returned at once to Oklahoma City when the word arrived. Robert Smith, vice president of Braniff who handles Washington matters for the line, enplaned immediately for the capital.

Capt. Eddie Rickenbacker, president of EAL, was in San Antonio on Aug. 13 soliciting civic aid for his company in his campaign to operate to Brownsville, but evidently had had very little advance notification that the contract was to be awarded.

Result of the action is that Eastern wins its hard-fought and long-sought route to Brownsville, providing a direct connection from Mexico to New York City, and also gets into San Antonio. It will be the only mail contract in the country calling for no payment whatsoever.

But Braniff airways will also operate the same routes, although it cannot carry the mail. It began non-mail operations before the May 18 deadline in the grandfather clause of the Act and therefore is entitled to a certificate.

What steps the CAA will take regarding duplicate service over the routes—if any step can be taken—is not known.

The air mail contract calls for operations between Houston and Brownsville via Corpus Christi, and between Houston and San Antonio. If Eastern interprets the law the way Braniff has done in the past, EAL is likely to say that it is entitled to operate between Corpus Christi and San Antonio which would be a duplicate mail service since Braniff is carrying the mail north of Brownsville via San Antonio.

One thing is certain: there will be plenty of passenger seats available in that area. EAL plans to operate 21-passenger DC-3's, and Braniff will operate 14-passenger DC-2's, making 35

seats available on the two services. Braniff's passenger traffic has been averaging five passengers per trip, considered good in light of the short time the service has been operated.

Both Eastern and Braniff bid for the contract, Eastern's bid being zero cents and Braniff's bid being \$0.00001907378c per airplane mile. Braniff protested that a zero bid was not legal—and would have so bid had it thought so—but on July 7 the Post Office Department declared the zero bid to be legal. On July 12 it announced it would not award the contract because of the creation of the Civil Aeronautics Authority.

S. D. Airmen to Meet

Pierre, S. D., Aug. 9—The State Aeronautics Commission today made tentative plans for a general meeting of South Dakota pilots and airport managers here sometime in September. Tom Roberts, Jr., chairman of the commission, stated that changes in license and application blank forms and allocation of gasoline taxes to airports will be discussed. Floyd Barlow of Rapid City, and Harold Markey of Huron, are the other members of the board.

Une Femme d'Affaires



Miss Marion Gates, head of United Air Lines, mid-west traffic division, with headquarters at Chicago. Miss Gates has been affiliated with UAL's traffic department for six years. Her work now includes cultivation of travel among business women, womens clubs and other feminine groups. (Editor's Note—You blokes who aren't caught up on your French shouldn't draw conclusions from the top caption. Use your dictionary).

Hughes Establishes New Transcontinental Mark, Testing Mask

New York, Aug. 20—Howard Hughes and three companions landed at Floyd Bennett Field in the Lockheed 14 round-the-world monoplane yesterday after flying from Glendale, Cal., in 10 hrs. 32 mins. 20 secs. The flight broke the transcontinental record for transport-type planes of 11 hrs. 5 mins., set by D. W. Tomlinson in a TWA Douglas on Apr. 30, 1935. On Jan. 19, 1937, Hughes set a transcontinental racing plane record of 7 hrs., 28 mins., 25 secs.

Hughes flew at an average altitude of 17,000 ft., chief purpose of the flight being to test the new oxygen mask invented by Dr. W. R. Lovelace and other physicians at Mayo Clinic, Rochester, Minn. (AMERICAN AVIATION, Aug. 15). Accompanying Hughes were Harry P. McLean Connor, one of his navigators on the round-the-world flight; Glenn Odekirk, superintendent of the Hughes Airplane Co., Los Angeles, who was co-pilot, and Charles Perrine, radio operator.

The Lockheed, which is powered with Wright Cyclone motors, averaged 229 mph. for the 2,478-mile flight. Performance of the oxygen masks was described as "satisfactory," all men aboard using oxygen from the same tank and reporting no bad effects. Hughes stated that, in his opinion, it would improve the efficiency of airline pilots to take oxygen in varying degrees after leaving sea level.

Army Douglas in Non-Stop

The War Department announced Aug. 20 that a Douglas B-18 twin-engine bomber that day completed a non-stop transcontinental flight from Hamilton Field, San Francisco, to Mitchel Field in 15 hours, 38 minutes, a distance of 2,570 miles. Weight at take-off was 25,000-lbs. Lieut. John G. Armstrong was the pilot.

C. M. KEYS ACTIVE

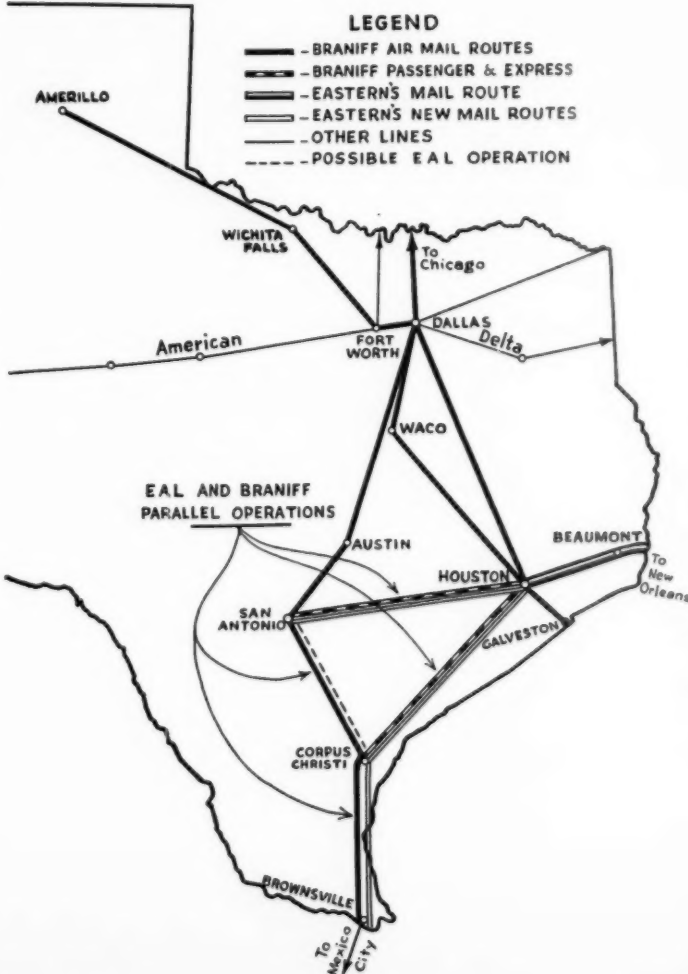
Proposes Big Trans-Atlantic Base on Montauk Point

C. M. Keys is planning to re-enter aviation by way of a proposed seaplane base and landing field on Montauk Point, Long Island, according to reports. Mr. Keys was one time president or chairman of National Air Transport, Transcontinental Air Transport, North American Aviation, Eastern Air, Sperry Gyroscope and the Curtiss-Wright Corp.

At present he is president of the Montauk Beach Co., Inc., a company which recently took over the \$12,000,000 development of Montauk Point started in 1925 by Carl G. Fisher. Plans involve development of Napeague Bay, a spacious and deep shelter for aircraft carriers, etc. He plans to fill in a section of this bay to make an airport for land planes. An air ferry service between Montauk and New York is contemplated also. He envisions the site as a logical point of departure and arrival for trans-Atlantic services.

Denver Show Group

Denver, Aug. 19—A committee of local aviators in charge of the annual air show to be held here Sept. 11, sponsored by the local NAA chapter, is headed by Capt. Ray Wilson, Warren Prosser, and Walt Higley. John Stark is chapter president. Maj. F. W. Bonfils, NAA governor in Colorado, will be in charge of timers and Charles O. Woodworth, airport manager, will direct field activities.



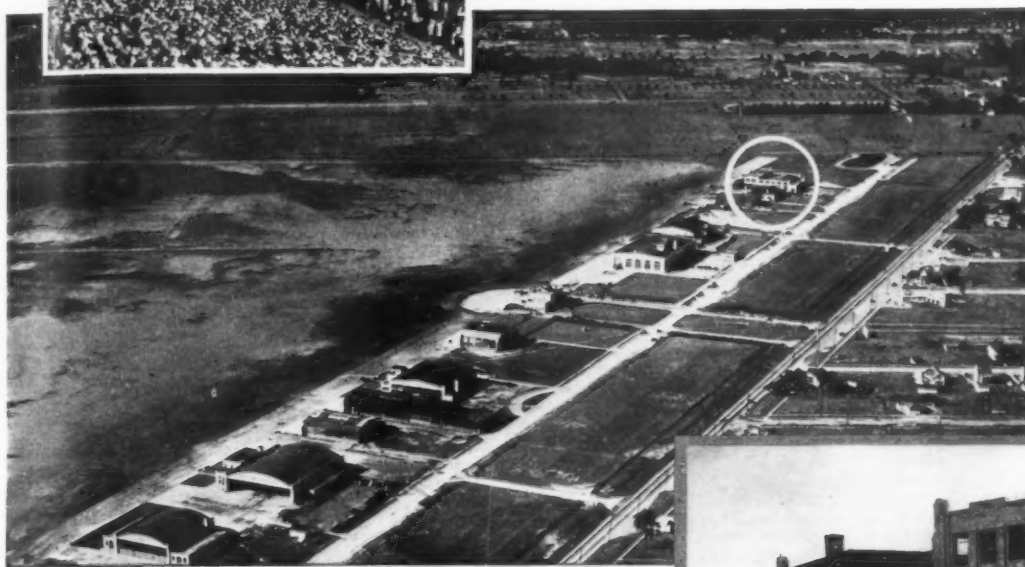
Map shows area covered by new EAL contract and parallel services to be operated by EAL and Braniff.

CLEVELAND...



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Cleveland Municipal Airport
where the National Air Races
take place, September 3-5.

Texaco hangar at Cleveland
Municipal Airport, equipped
to service ships and engines,
and supply Texaco Aviation
Products.



HERE WE ARE... right over the northeast corner of the Cleveland Airport... waiting to bid you a cordial welcome to the National Air Races.

Here, during the National Air Races and throughout the year, you may have your ship cared for, adjusted, tuned up, and replenished for top performance with Texaco Aviation Gasoline and Texaco Airplane Oil.

If already a Texaco user, you know... if using Texaco for the first time you'll soon learn why

more scheduled airline mileage is flown with Texaco than with any other brand.

Back home again, remember that Texaco Aviation Products are available through any of Texaco's 2108 warehouse plants. To order, call the nearest plant, or write The Texas Company, *Aviation Division*, 135 East 42nd Street, New York City.



TEXACO *Airplane* OIL

Trans-Canada Asks U. S. Permission to Operate Into Buffalo and Detroit

Trans-Canada Air Lines has formally applied to the United States Government for permission to operate into Buffalo and Detroit and across the state of Maine, it was learned in Washington. At the same time United Air Transport, Ltd., a Canadian line operating north from Edmonton, Alberta, seeks permission to fly to Fairbanks, Alaska, from its present terminus at Whitehorse, Yukon Territory.

The applications were made to the Department of Commerce, which had jurisdiction over the matter until Aug. 22, and were turned over to the Civil Aeronautics Authority. No action has been taken to date. The State Department is also to advise on the petitions.

Trans-Canada, which expects to get its entire transcontinental route in operation next year, wants to make connections with American Airlines at Buffalo and Detroit. It has taken the position that American lines are flying to Montreal and to Winnipeg, and therefore it should be permitted to land its planes at two American ports. The Buffalo connection would link up with both American and Pennsylvania-Central, and the same connections would hold true at Detroit, giving direct air service from Canadian cities to Washington, Cleveland, Chicago and other centers.

Trans-Canada's desire to operate into Detroit and Buffalo is of fairly recent origin and the two points were not included in the original transcontinental plans. But the application to fly over Maine, without stops in the U. S., has been long expected in Washington. This link would connect Montreal and Quebec with the Maritime Provinces and the trans-Atlantic service.

United Air Transport, a wholly-owned Canadian company serving the Far North with passengers, mail and a large volume of air freight, was expected to file application to enter Alaska as part of the campaign to build a "Sunshine Route" from Alaska through Edmonton to the United States. For some time Pacific Alaska Airways, a PAA subsidiary, has been using Whitehorse, Y. T., as a terminal, and a reciprocal

arrangement for a Canadian airline was expected to be requested.

Joint connecting schedules between Trans-Canada and American are now being discussed by the two lines so that only a brief change of planes at Buffalo and Detroit will be necessary for through passengers. There has been no intimation from the CAA as to its action, but it is expected that the Authority will approve of the arrangements.

90th Aero Squadron to Hold Reunion in L.A.

Los Angeles, Aug. 23—The 90th Aero Squadron, one of the first to go into action during the World War, will observe its 20th anniversary by holding an annual reunion here on Sept. 17 in connection with the national convention of the American Legion.

Former Governor Guilbert Winant of New Hampshire has been invited as guest of honor. Gov. Winant was commanding officer of the 8th Aero Squadron when the 90th and the 8th were members of the same group during the St. Mihiel offensive.

The reunion will be held at the Clark Hotel, aviation headquarters for the Legion convention. Headquarters for the 90th Aero Squadron Association are at 9018 Rosewood Ave., Los Angeles. Four former pilots of the 90th are now making their homes in Los Angeles, including Carl Squier, vice president of Lockheed Aircraft Corp.; John Livingston, of radio station KEHE; Leland Carver, U. S. Treasury Department; and John Young, of Young, Clarke & Co., brokers.

Paper Buys New Waco

The New York Daily News has recently acquired a new \$14,000 four-place Waco biplane. Through an annual trade-in agreement, one plane is replaced every year by a new one which allows only a 2-year use of each ship. Thus the newspaper has at its disposal at all times a two-ship fleet. The planes are hangared at Roosevelt Field.

For National Guard Squadrons



The North American Observation Airplane O-47A, latest type of Air Corps observation plane, with which all National Guard squadrons will soon be equipped. It will be utilized also during the Third Army maneuvers to take place soon in the south and southeastern parts of the country. Air Corps Photo.

Little Rock Acquires Old Waynoka Hangar

Little Rock, Ark., Aug. 19—A giant hangar with an original price of \$100,000 has been erected at Adams Field here for about \$20,000. Late last summer Little Rock officials sought to stimulate air travel through the city and set out to acquire a suitable hangar. Seisel A. Franklin, manager of Adams Field, recalled the empty and neglected hangar at Waynoka, Okla., and negotiations began.

The structure, 200-ft. long and 100-ft. wide, with accommodations for 35 planes, was erected in the early '20s when Waynoka was an important link in transcontinental air travel. Passengers flew by day and transferred to trains at night. Transfer points were Columbus, O., and Waynoka. With installation of night flying equipment, Waynoka faded from the airline maps as a terminal and the hangar was abandoned.

Little Rock authorities purchased the hangar for \$10,000. The city disassembled it at a cost of \$5,000, and an additional \$4,000 was spent on shipping. After the dismantled building arrived WPA men set to work and late in July the resurrected hangar was turned over to the city.

Capt. Charles J. Craig, chairman of the city council airport committee says that in addition to making Adams Field more complete, the hangar will add approximately \$2,500 a year to the airport's rental revenue. All shop space already is rented. Another asset is expected to result in a lowering of insurance rates on planes berthed permanently in the building.

NEW FREQUENCIES

Eight Channels Given to Airlines by FCC

The Federal Communications Commission has assigned to Aeronautical Radio, Inc., the following radio frequencies for use by the following airlines:

Pennsylvania-Central: 5825 kc. as a 2nd day frequency and 4480 kc. as a 2nd night frequency, plane to ground.

Continental: 5172.5 kc. for use by this line exclusively, canceling the shared frequency with Inland Air Lines, plane to ground.

Chicago and Southern: 5215 kc. for point to point use.

Northwest: 10965 kc. for point to point use.

Western Air Express: 10855 kc. for point to point use.

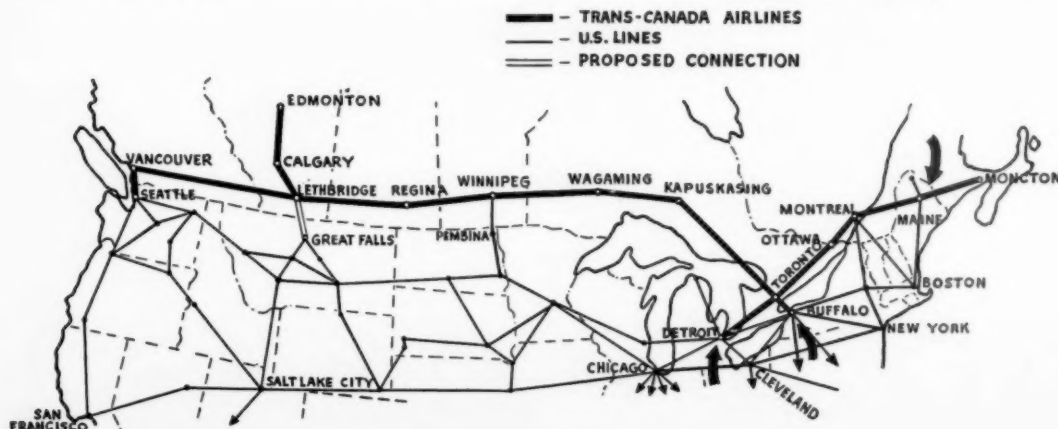
American Airlines: 6540 kc. for plane to ground.

TWA: 6520 kc. for plane to ground.

United: 12165 kc. for plane to ground.

How Trans-Canada Connects with U. S. Lines

Arrows indicate U. S. territory for which Trans-Canada Air Lines has asked landing or flying privileges. No stops would be made in Maine. Three links with the U. S. already exist: at Montreal via Canadian-Colonial Airways; Winnipeg, via Northwest Airlines, and Vancouver-Seattle via jointly-operated service by Trans-Canada and United Air Lines. Another connection is proposed between Lethbridge and Great Falls. Because of shorter mileage, Trans-Canada may be a serious competitor with U. S. lines for business out of New York to Winnipeg and Vancouver by way of Buffalo.



160,000 "uneventful" miles...

As flight officers check in at the end of an exacting schedule at great airports all over the world, "uneventful trip" is their usual report to operations executives.

Contributing significantly to this routine phrase is the work of the Sperry Gyropilot, Gyro-Horizon and Directional Gyro. Their accuracy and reliability have helped make possible new standards of performance the world over. On commercial air lines alone, 160,000 miles a day are flown with the Gyropilot...160,000 miles that Sperry has helped to make "uneventful"!



SPERRY
GYROSCOPE CO.-INC.
BROOKLYN, NEW YORK

\$300,000-a-Year Joint National Advertising Program Near Reality

Eight-Year Effort to Sponsor Cooperative Campaign With Manufacturers and Airlines Participating Is Nearing Culmination

A long-discussed joint national advertising campaign in which all scheduled airlines and the manufacturing industry would participate, is about to materialize. At last reporting only two smaller airlines were yet to sign.

The proposal calls for a \$300,000-a-year fund for a period of three years, half of which would be provided by the airlines and half by manufacturers supplying products to the airlines. The whole project is being carried on through a committee of the Air Transport Association.

For eight years a cooperative advertising program has been proposed but not until this year did it begin to materialize. Among those who have consistently advocated such a campaign is Harold Crary, vice-president-traffic of United Air Lines. Charles A. Rheinstrom, vice-president-sales of American Airlines, has been especially active this year in lining up support and ironing out minor differences.

Other members of the committee are Paul Brattain, vice-president of Eastern Air Lines; John B. Walker, vice-president of TWA, and Charles E. Beard, vice-president of Braniff Airways.

It is not believed that the two "hold-outs" will block the whole project by refusing to participate.

The general plan of financing was the setting up of a base rate for individual companies, depending upon their passenger revenue and then on that was added a pro rata based on the basis of revenue passenger miles flown. This permits certain of the smaller lines to participate in the \$300,000 fund for as low as \$1,100 to \$1,500, while the assessment of the "Big Four" ranges from \$20,000 to \$30,000 each per year.

The committee has already received assurances from a substantial number of manufacturers agreeing to assist in the financing, a number of the manufacturers coming in without the committee having to give much of a sales talk. They believe the best way to sell more of their products is to get more people air-minded and more airplanes used.

No advertising agency has been chosen or considered, and none will be

considered until the airlines have perfected their own organization and the money has been fully subscribed. There has been no decision as to what type of media will be used as the committee members will, naturally, rely upon the advice of the advertising agency selected.

The bulk of sales executives in the industry believe a joint national advertising program designed to get more people to use airplanes and eliminating all competitive sales appeal, would be the biggest forward step in sales appeal ever taken by the industry.

Is Paramount Financing Assoc. of Men with Wings? It's Your Guess Now

Chief topic of conversation in aviation circles in New York during the dull and hot (plenty hot) days of August was whether or not the Paramount film company had anything to do with the Association of Men With Wings, an organization ostensibly organized for the purpose of bringing the original Wright plane back to the United States.

It just so happens that Paramount is bringing out a super-super-colossal film entitled "Men With Wings," all set for a premier in September amid much ballyhoo. Paramount has already marked up one publicity achievement to its credit by joining with TWA in a super-super-colossal press junket to the West Coast to see the filming.

As to whether Paramount has anything to do with the Association of Men With Wings seems to depend entirely on which side you want to cast your lot. The rumors were around New York that Paramount was paying the office rent of the Association, that they started the whole business, that they were financing the entire venture, and that it was just a swell publicity gag.

On the other hand, the officers of the Association of Men With Wings were determinedly combatting such dastardly views with very affirmative statements that Paramount (and all

Post-Rogers Marker

A 12-foot granite obelisk erected to the memory of Wiley Post and Will Rogers near the spot where they met death was dedicated in Walakpa Lagoon 100 yards from the Arctic Ocean in Alaska Aug. 15, marking the third anniversary of the crash. The cenotaph, made from granite from Rogers' home town of Claremore, Okla., is inscribed "Will Rogers and Wiley Post, American ambassadors of good will, ended life's flight here August 15, 1935."

Matamoras Air Circus

Matamoras, Pa., Aug. 23—Municipal airport will be dedicated here Sept. 1-4 with an air circus and exhibition expected to attract aviation notables from New York, New Jersey and Pennsylvania.

**YOU CAN FLY
THE ATLANTIC
TO
Bermuda
FOR \$70**

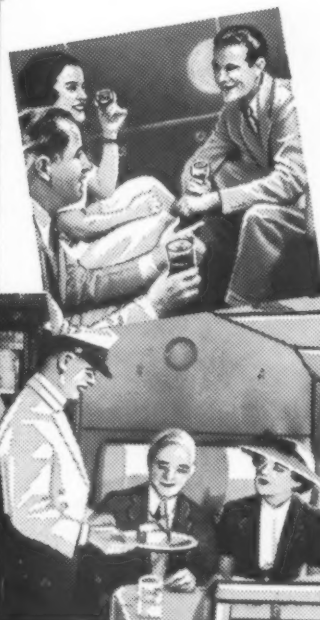
(\$120 ROUND TRIP)

A five-hour Air Cruise to these mid-ocean pleasure islands.

The U. S. A. Bermuda Clipper leaves every Wednesday and Friday (8:30 a.m., E. S. T. from Baltimore; 10:30 a.m., E. S. T. from Port Washington (New York).

Time for a cocktail, that famous "300 mile luncheon" and you're there.

Stay over a day or a hundred. You can return any Thursday or Sunday.



ENJOY THE FAMOUS LUNCHEON
served en route without charge. Enjoy the comfort of the smoking lounge, a stimulating cocktail, or recline in an easy chair.

**PAN AMERICAN
AIRWAYS SYSTEM**

135 E. 42nd St., N. Y. C. Murray Hill 6-3900
RESERVATIONS THRU ANY TRAVEL AGENT

Shushan Airport Goes Arty



Thousands of New Orleans citizens have visited Shushan Airport recently to view this newly completed "Fountain of the Winds," which is in the center of a reflecting pool before Moffett hangar. The figures are of concrete poured into moulds made by the sculptor, Enrique Alvarez, of New Orleans. Colored lights underwater illuminate the group at night. Other improvements costing about \$250,000 have been turned over to the Orleans Levee Board, field operator, by the WPA, including the Shushan Airport swimming pool which is 80 by 40-ft. and a bath house and locker room 60 by 40-ft. Two tennis courts, a sub-surface sprinkler system, an auxiliary power plant, extensive paving, curbing and landscaping complete the improvement program.

S. C. Aero Commission Launches Program to Maintain Own Airports

Buys Tractors and Trucks, Solves Upkeep Problem by Doing State-Wide Job Itself Without Federal Aid

The South Carolina Aeronautics Commission has solved the problem of maintaining its \$4,500,000 worth of airports by buying its own tractors and trucks which make the rounds of the state and keep the publicly-owned fields in good condition at all times.

It is believed to be the first state to undertake maintenance as part of the duties of the state aeronautics commission with its own equipment. In a few states—notably Florida—maintenance is carried on by the state highway department, but in South Carolina the work is not aided by any other department or by any federal funds.

Dexter C. Martin, director of the commission, reported on Aug. 22 that the two maintenance crews had just completed their first complete tour of the airports and that the plan was working out with eminent satisfaction.

"The South Carolina Aeronautics Commission is supported entirely from the state aviation gasoline tax," Mr. Martin said. "It had no state appropriation to help carry their share of sponsoring WPA projects, purchasing equipment, or in the construction of their administration building and hangar at Columbia. Their annual receipts amount to less than the usual budget for any fair sized mid-western city's airport. With such limited funds a complete change in its program would be necessary.

"In 1938 the commission came face to face with a situation that is causing nation-wide concern: maintenance. It found that municipalities had either drained their treasuries or burdened themselves with debt in order to have airports and had not made provision for their upkeep. In several cases where renter-operators had agreed to maintain the fields, they found little or no equipment and the landing areas badly in need of attention. Grass and weeds were growing so high that the fields were becoming a hazard to air travel instead of an aid.

"To meet the invading grass, weeds, washes and general depreciation, we purchased two tractors with mowers attached and two 1½ ton trucks with specially constructed bodies. The sides served as runways to load and unload the tractors. With these two mobile

units, which have been in operation since June 15, they have already groomed each of the principal airports.

"At one airport the maintenance crew reported they had found the proverbial two Cubs and a transport plane—lost for three years in the high grass and blackberry bushes."

The maintenance program is the latest step in a state-wide development begun in 1935 when the state legislature created the aeronautics commission to promote the welfare of aviation within the state. Although a legally constituted regulatory board, the commission placed first emphasis on promotion and set out to secure coordination of federal, state and municipal activities. A state-wide airport program was first planned and during the three years 17 airports have been built or greatly improved. Seven privately-owned fields have had municipal privileges extended to private flyers.

Of the 24 airports in the state, 15 are of the landing strip type, 5 are all-way fields, and 4 have paved runways. The total area of the airports is 2,704 acres. More than 100 air markers have been painted. Of the four cities having more than 25,000 population, each has a highly developed airport and each is served by scheduled airlines.

Without federal, state or local assistance, the commission is manufacturing its own wind cones, wind tees and boundary markers. Promotion has included the sponsoring of air meets, model clubs and air mail promotion.

Mr. Martin's slogan is, "Let aviation pay its own way." Members of the aeronautics commission are J. P. Williamson, of Greenville; Dr. George Bunch, of Cheraw, and Dr. George Benet, of Columbia. Assistant director of the commission is E. F. Markwood, Jr.

Top Center: Recently completed building on Columbia, S. C. Airport which houses the South Carolina Aeronautics Commission.

Lower Photos: Tractors at work mowing weeds at Charleston, S. C., and loaded on trucks at Columbia ready for a trip to a field in another part of the state.

PIPER TOUR TO CANADA

Flyers to Visit Canadian Exposition and Cleveland Air Races

Lock Haven, Pa., Aug. 24—A sportsman's air tour, covering the Canadian National Exposition, Toronto, and the National Air Races at Cleveland, has been announced by Piper Aircraft Corp. which with Cub Aircraft, Ltd., is sponsor. R. L. Gibson, president of Cub Aircraft, Ltd., is manager of the tour, and Marshall Cleland of Toronto, will lead the flight.

Planes are scheduled to leave Buffalo for Hamilton, Ont., on Aug. 30. At Hamilton, members will visit the Cub factory, and will then be guests of the St. Catherine's Flying Club. On Aug. 31, the Toronto Flying Club will be hosts, and take the visitors to the Exposition. The sportsmen will then fly en masse to the Cleveland Races.

CALLS FIELD SAFE

Detroit Manager Defends Airport; Oakland County to Build

Detroit, Aug. 14—C. V. Burnett, manager of Detroit City Airport, yesterday called the field safe for the larger equipment that will be operated by the airlines in the near future. His statement was prompted by announcement that the Oakland County board of supervisors is preparing to build an airport near Southfield.

Burnett stated that the airlines want a close-in field, and pointed out that the city has a \$4,500,000 investment in the airport. He said that he has recommended to Mayor Reading that the airport be made a separate city department and that a long-term aviation program be developed.

O. M. Mosier, vice president of American Airlines, is quoted as saying that "within two years we expect to be using directional landing beams requiring a 20-1 glide. There are all kinds of obstructions around City Airport that would make that landing angle hazardous. Even removing the gas holder from the field, at a cost of \$2,000,000, would not solve the problem."

Piper Men Aid Two Ground Schools

Lock Haven, Pa., Aug. 12—Piper Aircraft Corp. has announced two ground school courses, one being taught by members of the factory staff and the other, not directly sponsored by the company, being a nation-wide course for the Cub Fliers of America.

Hanford Eckman, factory superintendent, is leading an orientation ground school for about 200 CCC boys at Loganton, Pa. It is jointly sponsored by the educational director, and Piper. At the conclusion of training, six boys will be chosen for practical schooling in aircraft welding at the factory. Instructors are Eckman, Edward Burn, Kenneth Kress, Thomas Case, Harland Van Bortel, and three others as yet unannounced.

The Cub Fliers' course, lasting a year, consists of lessons prepared by Lock Haven chapter members—employees of the factory: Edward Burn and David Long, engineers, and Harland Van Bortel and Richard Barber, division superintendents.

PROTESTS HAZARDS

BAC Inspector Says Stack and Tower Must Be Removed

Richmond, Va.—Aug. 15—Unless a 170-foot-high brick stack and a 152-foot water tower are removed, curtailment of night flying at Byrd Airport will have to be ordered, according to word from B. F. Nicholson, BAC airlines inspector.

State, county, city and airport officials have conferred on the complaint and agreed to use every possible means to eliminate the hazards.

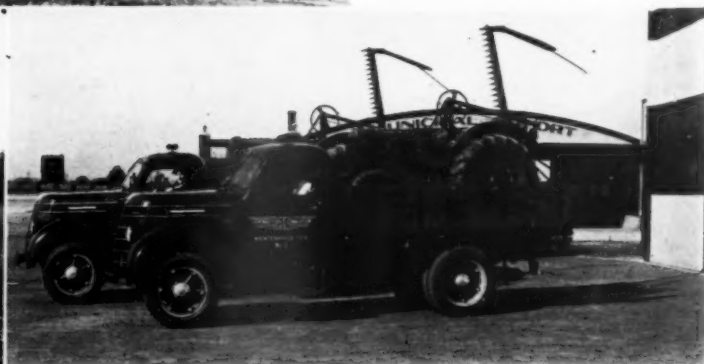
New Meteorology Department at N. Y. U. College to Open

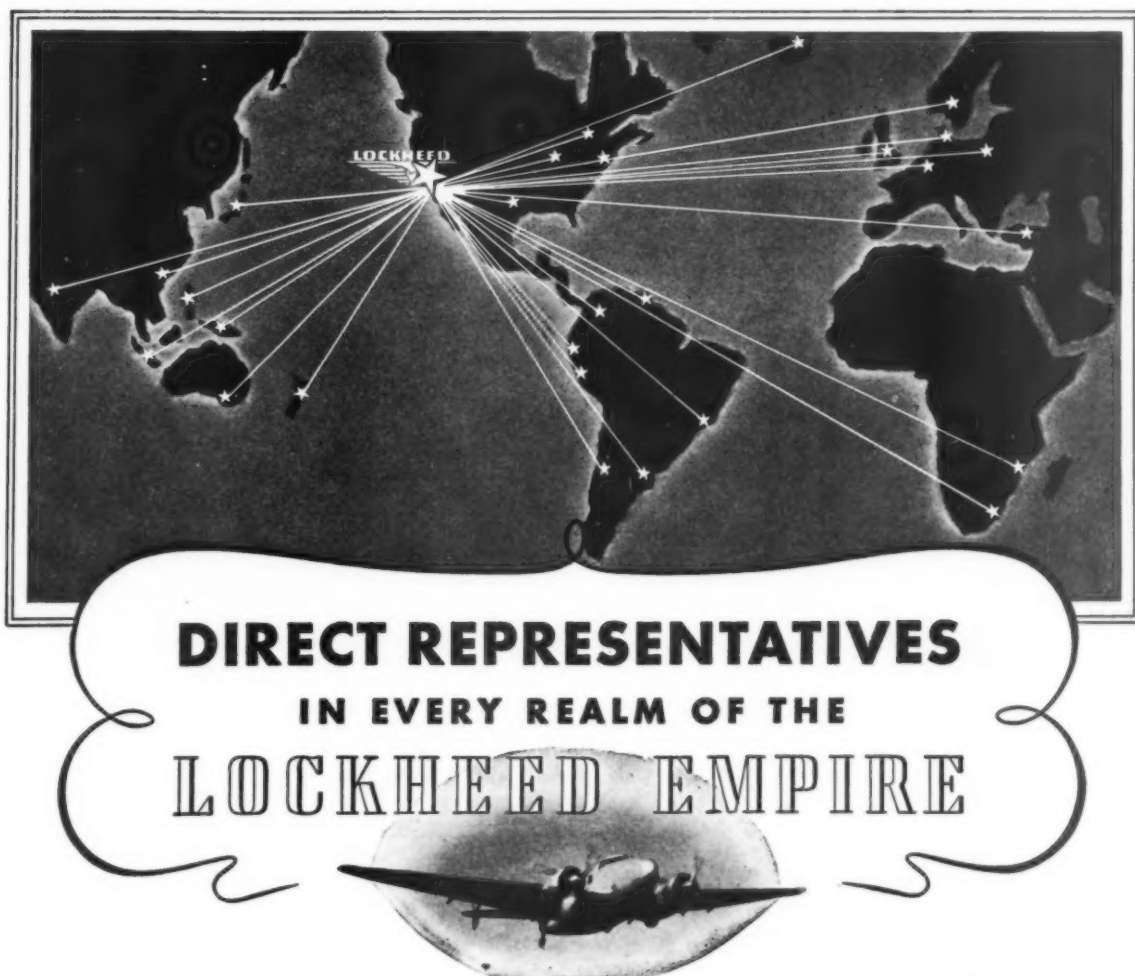
New York, Aug. 22—A new department of meteorology will open at New York University College of Engineering in September, and will coordinate much of its work with courses in air transport in the Guggenheim School of Aeronautics, according to Dean Thorndike Saville. Prof. Athelston F. Spilhaus will be chairman and Gardner Emmons has been appointed assistant professor. Mr. Emmons for two years has been associate meteorologist of the central office of the U. S. Weather Bureau in Washington. He is a graduate of Harvard College and has been instructor in meteorology at Harvard.

"We are developing this phase of the work because of the constantly increasing demand for trained weather men," Dean Saville said. "The most important fields for meteorologists are in the weather bureaus and the air transportation industry."

Night Parachute Record

London, Aug. 14—Gwynne Jones, 28-year-old Welsh parachute jumper, claimed a new world record night drop last night with a leap of 20,000 ft.





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UNITED STATES—Courtlandt S. Gross, 614 Chrysler Bldg., New York; George Swayne, Asst.; Roscoe J. Behan, 2353 Field Bldg., Chicago; Don Marshall, Love Field, Dallas. **CANADA**—Fairchild Aircraft, Limited, Longueuil, Quebec.

★ SOUTH AMERICA ★

H. J. White, Sales Manager in charge of South American sales, Diagonal Norte 567, Buenos Aires. **ARGENTINA, PARAGUAY, URUGUAY, CHILE**—Tri-American Aviation Corp., Buenos Aires. **VENEZUELA**—C. Adrianza & Co., Inc., Caracas. **BRAZIL**—Oscar Taves & Co., Rio de Janeiro. **ECUADOR**—Rabadeneira, Saenz & Cia., Guayaquil. **COLOMBIA**—Lewis T. Wilkie, Bogota. **PERU**—Faucett Aviation Co., Lima.

★ EUROPE, AFRICA, INDIA, ASIA MINOR ★

Norman Ebin, Direct Factory Representative in charge of Europe, Africa, India and Asia Minor. Ferris M. Smith, Ae. E. Asst., Cable "Emteha," Warsaw, Poland.

HOLLAND, DUTCH EAST INDIES—Lindeteves-Stokvis, Amsterdam. **DENMARK, NORWAY, SWEDEN, ICELAND**—Cai Caspersen, Copenhagen. **INDIA, BURMA, AFGHANISTAN**—Govan Bros., Limited, New Delhi, India. **TURKEY**—Fuat Baban, Ankara. **UNION OF SOUTH AFRICA, PORTUGUESE EAST AFRICA**—Barlow's Motor Co., Ltd., Durban, Natal, S. A.

★ ASIA ★

CHINA—James W. Fisher, c/o American Eastern Aviation, Hongkong. **JAPAN**—Okura & Co., New York City and Tokio.

★ AUSTRALIA, NEW ZEALAND, PAPUA AND MANDATED TERRITORIES ★

Brown & Dureau, Limited, Melbourne and Wellington

★ PHILIPPINE ISLANDS ★

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LOCKHEED AIRCRAFT CORPORATION, BURBANK, CALIFORNIA, U. S. A.

NON-SCHEDULED Aviation

Aeronautics Act Imposes No New Burdens on Private Flyers—Gorrell

CAA Is to Administer Act Evenly With No Special Advantages to Either Carriers or Individual Pilots, Transport Head Asserts

The new Civil Aeronautics Act of 1938 does not introduce radical new requirements for the private flyer or place upon him new onerous burdens, in the belief of Col. Edgar S. Gorrell, president of the Air Transport Association, who discussed the Act in relation to the private flyer at a recent meeting in Chicago.

"The rumors that private flyers were threatened with a hopeless entanglement by the new legislation are groundless," he said. "The regulation of his operations will continue along established and familiar lines. The changes from the Air Commerce Act, as far as he is concerned, have been in the direction of promoting uniformity and simplicity throughout the nation, rather than in the direction of new instruments of regulation."

Col. Gorrell said in two respects the jurisdiction of the federal government conferred by the Air Commerce Act is modified by the new law. This modification, he said, will be welcomed by the private flyers because it contributes to the uniformity of regulation which is so essential to avoid confusion and to promote coordinated development of aeronautics.

One modification is the inclusion of airports under jurisdiction of the federal government. The other is the definition of air commerce. "This definition is of importance because it sets forth the operations which are to be subject to the safety regulation of the federal government."

"Under the Air Commerce Act of 1926, the power of the Bureau to require airworthiness certificates and airman certificates was apparently confined to certain types of commercial operation from one state to another or to a foreign country. The power to require other types of certificates or licenses was obscure. And the power to enforce air traffic rules was apparently so broad as to invite serious constitutional questions. As a practical matter, therefore, no one was ever quite certain which of the regulations of the Bureau of Air Commerce could be enforced and under what circumstances. This uncertainty, as a practical matter, restrained enforcement."

"Under the new Act, however, all doubts respecting the extent of the federal government's power have been eliminated. For the commerce regulated by the new Act is defined to be all aircraft operations, both commercial and non-commercial, between the states or between this country and abroad, and likewise all aircraft operations within the limits of any civil airway. This will make it perfectly clear that federal certificates can be required in all necessary cases and it will do away with the constitutional doubts regarding the extent to which the federal government may enforce traffic rules."

Col. Gorrell also points out in this connection that the terms of the law requiring aircraft registration have been changed. Under the old act there was no absolute requirement that aircraft be registered as an aircraft of the U. S. unless it would be used for a commercial purpose in commerce between the states or with a foreign country.

"The new Act, however, requires every aircraft to be registered, regardless of the purpose for which it may be used and regardless of the place where it may be operated."

He said economic regulation created for the commercial air lines would not in any way extend to private flyers. The only economic matter affecting the private flyer, he said, was the provision respecting the recording of conveyances affecting title to aircraft. Hitherto when one has desired to buy or sell aircraft or to mortgage or otherwise encumber aircraft, it has been necessary to comply with the recording laws of each different state with which one might be concerned.

"This condition has often presented the most serious inconvenience. In an effort to overcome this difficulty, Congress has provided in the new law that all conveyances or similar instruments, hereafter entered into, affecting the title to all civil aircraft, shall be recorded with the Civil Aeronautics Authority and thereupon such conveyances shall be valid as to third persons without any further recording."

"Congress has clearly in mind the important and unique position of the private flyer. It went so far as to provide, in specific terms, that in making its regulations and in administering the Act the Authority should give full consideration to the specific needs of the private flyer—a provision not appearing in the Air Commerce Act. And the Act contains an express direction to the Authority to give preference neither to air carriers nor to private flyers. The Authority is to administer the law with even-handed concern for the peculiar needs of all who fly."

Beverly Howard Adds 3rd Airport to Hawthorne Flying Service "Chain"

Columbia, S. C., Aug. 22—On Sept. 15 the Hawthorne Flying Service headed by Beverly E. Howard will take over management of Owens Municipal Airport here under terms of a five-year lease. The new firm succeeds B. P. Parrish as manager.

This is the third flying service to be established by the Hawthorne firm. Since 1932 it has been operating at Charleston, S. C., and in April of 1937 it took over the Keeton-Parker Flying Service of Mobile, Ala. Mr. Howard will manage the three services from the home base at Charleston. Frank E. Hand, transport pilot of Louisville, Ky., will be in charge at Columbia, and J. P. Parker is in charge at Mobile.

At Columbia the company will operate a flying service and repair station, manage the airport and hangar, maintain planes for sightseeing and charter flights, conduct air shows and service planes stopping at the airport.

The Hawthorne service was incorporated in 1932 and headed by the late A. M. Luke. Subsequently the service was operated by T. Prioleau Ball, now a pilot for Delta Air Corp., until Howard was made president Jan. 1, 1936. For two years Howard has been a pilot for Eastern Air Lines but re-

Not Exclusive



It isn't true that scheduled airline people think only in terms of transport planes. Among the increasing number of air transport industry people who are also private flyers is Katherine Sigler, above, of Eastern Air Lines' city ticket office in New Orleans, who spends her leisure time building up her flying hours at Shushan Airport. A student of Edna Gardner, Miss Sigler has 18 solo hours, half in a Taylorcraft and half in a Monocoupe.

Heaviest Student

South Bend, Ind.—The Indiana Air Service, Inc., at Bendix Field, claims it has the nation's heaviest student pilot. He is Clement Winkowski, deputy county clerk, who has been taking lessons in a Piper Cub despite his 305 pounds. C. A. Lippincott is the instructor. Winkowski recently flew solo for 30 minutes.

Taylorcraft Mop Up Air Race Trophies

Alliance, O., Aug. 9.—Taylorcraft pilots won 1st, 2d, and 3d prizes during the Bernarr Macfadden trophy contest, part of the Michigan Air Tour, July 24 to Aug. 2, Taylor-Young Airplane Co. reports. Taylorcraft also won first and third places at the Ionia, Mich., races recently.

Prize winner of the Macfadden competition was a de luxe ship flown by Ralph H. Barry of Aircraft Sales & Service, Municipal Airport, Saginaw, Mich. Lee Lathrop of Escanaba and Ralph Lee of Detroit took 2d place in a Taylorcraft owned by Fred Bradley of Rogers City. Miss Marian Weyant of Lansing and Sam Burns of Saginaw were awarded third prize for performance of their ship. Trophies are being engraved and will be displayed in the lobby of the Detroit City Airport administration building.

At the Ionia program first place in the race for planes of 50-hp. or less was won by a de luxe Taylorcraft flown by Ralph H. Barry, and third place was taken by the same plane which won the corresponding place in the Macfadden race.

Oklahoma Cities Fail to Aid in Air-Marking

Oklahoma City, Aug. 22—Medium-sized chambers of commerce in Oklahoma were criticized yesterday by Bennie Turner, aviation editor of the *Oklahoman* for failure to assist in the job of air-marking the state.

"Why is it that Oklahoma chambers of commerce will brag about themselves until you begin to believe they are real civic workers and then come along and flop a simple assignment?" Turner asked. "We wonder, because some of those who have done the most crowing are unknown to airmen, for the simple reason they will not spend \$10 to air-mark their city."

The state, Turner stated, had a chance to get a \$50,000 airmarking job done for \$3,500. The larger municipalities did their parts, but the smaller communities, which would only have to contribute \$10 each, did not cooperate.

"We have a list and in the future plan to check it whenever the promotion boys open up with their bragging and be governed accordingly," Turner concluded.

AIRPORT ADVISERS

Arkansas Planning Board Names Committee to Plan Ahead

Little Rock, Ark., Aug. 15—Chairman Charles L. Thompson of the Arkansas Planning Board has designated an advisory group of 12 to serve on an airways and airports committee of the state board. Those named were:

Robert M. Williams, of Little Rock, chairman; Felix G. Smart, Pine Bluff; Siesel Franklin, manager of Adams Field at Little Rock; Capt. Charles M. Taylor, Little Rock, 154th Observation Squadron, Ark. Nat. Gd.; Tom J. Flaherty, Little Rock, Bureau of Air Commerce airport inspector; Lieut. J. Gilbert Leigh, Jr., Little Rock, 154th Obs. Squadron; Lieut. William D. Hopson, Little Rock, 154th Obs. Squadron; A. N. McAninch, architect and head of a private aviation firm of Little Rock; G. Russell Brown, Little Rock; Alfred M. Lund, Little Rock; Capt. R. H. Baker, Little Rock, 154th Obs. Squadron; Louis Tarlowski, Little Rock.

In asking the men to serve, Mr. Thompson wrote that there "is a wonderful opportunity to plan in advance and thus prevent any considerable economic waste" in the development of airways and airport facilities in Arkansas.

turned to Charleston in April to become field manager there.

Jacobson Tests Racer

Kansas City, Mo., Aug. 11—Joe Jacobson, nationally known speed flyer who operates a flying service at the local airport, took his new 1,600-lb. racing ship up for its first trial flight just before dusk today. According to Jacobson, he reached a speed of 200-mph. with his engine turning over only 2,000 of its maximum 3,200-rpm. On this basis, the new ship, designed by Clayton Folkerts but embodying some of Jacobson's ideas, should exceed 300 mph. when opened up, Jacobson believes.

Exceed Endurance Mark

Reno, Nev., Aug. 21—Ted Morrill and Mark Peters brought their model A Taylorcraft down today after remaining aloft 67-hrs. 5-mins., about three hours better than the record for light planes. They were not certain whether their flight will be recognized since they failed to surpass the former record by at least five hours. The project was sponsored by Reno merchants and civic organizations.

More Than 35,000 See Maine Show; New Air Attendance Mark for State

Aero Club Sells 50,000 'Chance' Tickets and Attracts More Than 100 Planes in Three Days for Clambake, Sky Exhibition, Dance and Banquet; Lund Praises Group

Augusta, Me., Aug. 21—Between 35,000 and 50,000 spectators attended the closing program of the second annual Maine Aero Rendezvous here today, breaking all records for aviation crowds. The three day program, featured elaborate shows Friday and yesterday, the latter being repeated today. About 2,000 witnessed yesterday's attractions. The Maine Aero Club, sponsor, will donate \$1,000 of its proceeds to a worthwhile children's organization, and establishment of a fund for disabled pilots who are club members is under consideration.

More than 50,000 attendance tickets, which gave holders a chance on two prizes, were sold, officials said. Carl Thompson, Camden, was declared winner of the first prize, \$1,000 in cash or a Piper Cub. Not being a flyer, he chose the money. Mrs. Ethel Fox, Harmony, Me., won second prize, a round trip plane ticket to California. Drawings were made by James Blaine Fowler, son of Capt. Burtis F. Fowler, president of the Rendezvous Corp., and William Campbell, son of Col. William N. Campbell, of Sanford, chairman of the Rendezvous executive committee.

Friday's program included stunts by Vincent "Squeek" Burnett, parachute jumps by Irvin Davis and Harold Brown, the latter of Augusta, Me.; sailplane exhibition flying by Emile Lebecka, and an act by the Baldridge Balloon Company. Roland Maheux of Lewiston, won the special Cub race over five miles, with a time of 7-mins.

8-secs. Harold Hersey, Lewiston, was second, and Douglas Gould, Farmington, third. In another race for Cubs staged today, Wesley Marden, Waterville, was winner. Autogiro and safety plane demonstrations were also shown.

Today's schedule included acrobatics by Bob St. Jock, of Lewiston; parachute leaps by Irvin Davis; demonstration of crop dusting by Ernest Pretch, which was sponsored by the State Department of Agriculture.

At the banquet attended by more than 300, given last night, Edward Lund, flight engineer on the recent Hughes round-the-world hop, told the group he was amazed that a state so far removed from the center of population could present an event of such magnitude. Congressman Ralph O. Brewster, Governor Lewis O. Barrows, and Congressman James C. Oliver also spoke. Mayor Frederick G. Payne, of Augusta, who is also corporation treasurer, was toastmaster.

Clarence McArthur, of Charlotte, N. C., demonstrated his 1910 model Lincoln Beachey pusher. In a gas model contest, Garry Lee, 17, of Winthrop, was proclaimed state champion. Only "incident" of the three days was a tail spin of a lightplane being tried out by Harry Oliver.

More than 100 planes visited the field over the week-end. Herbert Folsom, Rendezvous secretary, said there were 150 additional aviation enthusiasts present.

The Aero Club was organized 17 years ago, and present membership is

about 600, as compared with approximately 100 two years ago. Fee is now \$1 a year for all, flyers or non-flyers, who care to join. Club members keep close watch on legislation and maintain their own committees and attorneys. Another unique departure includes an election on the attitude the club should take with regard to all new and existing laws relating to flying. About two years ago Capt. Burtis Fowler, now state aviation director, began inviting pilots from outstate to week-end clambakes—no flying. So many accepted that flying was added and admission charged to meet expenses. At one show 115 members underwrote \$830 toward cost of bringing Tex Rankin here for the 1937 meeting. This year a third day was added, with the clambake retained, two air programs and a more elaborate entertainment schedule.

Irvin W. David, Auburn, is club vice-president; Frederick G. Payne, Augusta, is treasurer; Carl Fellows is clerk. Members of the 1938 executive committee, under William N. Campbell, chairman, included Dr. Clifford Strange, William Turgeon, Wesley Marden and Payne and Turgeon.

CHARLESTON EXPANDS Administration Building and Hangar to Be Erected

Charleston, S. C., Aug. 18—Charleston has drawn up plans for extensive enlargement and improvement of its municipal airport. Work on extending the e-w runway from 4,000 to 5,280 ft., and the nw-se runway from 3,000 to 4,000 ft. has already been started.

Beverly Howard, airport manager, has announced the improvement projects will cost about \$250,000. A hangar 150 by 250 ft. and a two-story administration building 120 by 70 ft. complete with control tower and weather observation facilities are planned.

No Manicures?

Peirce Gets About Everything
Else for Lessons

If you were to ask Pilot Arthur Segar Peirce of Lock Haven, Pa., how much he would charge to teach you to fly, he might absentmindedly say, "Twenty-four haircuts, 200 shaves, 12 scalp treatments, 24 tonics and 15 massages."

This is what Peirce is charging Harry H. Gramley, Lock Haven barber, for flying lessons in a Piper Cub. Gramley is receiving eight hours of dual flying instruction and five hours of solo flying.

Gramley also has another idea up his sleeve. After finishing his flying course he will attempt to talk W. T. Piper, president, and Ted Weld, sales manager of the Piper Aircraft Corp. into letting him buy a Cub on the "haircut and shave" plan. "A haircut down and a shave every day," will be his slogan.

ENDURANCE FLIGHTS

2 Attempts to Be Made to Break Records in September

Two light plane endurance flights have been scheduled for September.

An attempt to break the world's record will be made starting Sept. 2 at the state fair at Syracuse, N. Y., by Harold Allen, a Syracuse mathematics instructor and Merrill Phoenix, local pilot, in a J-3 Sport cub monoplane. The plane is powered by a Franklin engine manufactured in Syracuse by Air-Cooled Motors Corp. Two-way radio equipment will be carried.

Another record attempt will be made the second week in September at Pittsburgh-Butler Airport, Pittsburgh, by pilots Kenneth Scholter and Bobby Pyper with a two-place Aeronca. They have set a goal of 100 hours.

Present record for light planes is 63 hours and 55 minutes.

AGAIN *Taylorcraft* LEADS THE FIELD

In Performance, Appearance and Ease of Control

The New

50

Write
Today:

For complete specifications of this sensational new model airplane and name of a nearby Taylorcraft dealer. See and fly the new Taylorcraft 50.

AMERICA'S SAFEST
AND FINEST
LOW-PRICE
AIRPLANE

- ★ IMPROVED VISION
- ★ SMOOTHER CONTROLS
- ★ NO FLOOR OBSTRUCTIONS
- ★ BIG ROOMY CABIN
- ★ SINGLE OR DOUBLE DOOR
- ★ DELUXE ACCESSORIES
- ★ UNEQUALLED PERFORMANCE
- ★ STREAMLINE BEAUTY
- ★ LOW COST

Taylorcraft

TAYLOR-YOUNG AIRPLANE CO. - ALLIANCE, OHIO

Aeronca Advances Showing Date for Models; 1939 Chief in Debut

More Speed, More Space and More Streamlining Feature Next Year's Model Which Gets Fall Demonstration to Buyers

Departing from its policy of announcing its new models in the spring, the Aeronautical Corporation of America, Lunken Airport, Cincinnati, has announced its New Chief model for 1939, designated as the Model 50-C.

The ship will be featured at the National Air Races in Cleveland Sept. 3-5. New models will be announced each fall from now on.

"The new Chief is much more than an 'airport airplane,'" the company said. "It is smartly streamlined, beauti-

ful in appointments and appearance, and with greatly improved comfort. For a long time the public has wanted a low priced airplane that would top 100 miles per hour. This the new Aeronca Chief does, and has a cruising speed of a mile and a half per minute."

In addition to more speed, the 1939 model has a larger cabin, readjustments for passenger comfort which include no-draft ventilation, and complete upholstery of the cabin interior with deeper seats.

Aeronca's 1939 Chief: 100-MPH.



Aeronca's new 1939 Chief, just announced, which embodies greater speed, roomier cabin, and more passenger comfort, in addition to mechanical refinements. The ship will be shown at the Cleveland Air Races.

The fuselage is well rounded and deeper at the cabin, adding head room. The cabin is 4½-in. wider than the 1938 model. Doors are wide and have slight curvature. The sliding pylon windows may be adjusted in any position. The sloping windshield of the same material is made in one piece for maximum visibility. A new streamline cowling houses the complete motor, except for the exhaust stacks, improving both aerodynamic characteristics and appearance. Cooling is accomplished by vertical louvers.

Directly back of the pilot and passenger is a large baggage compartment. Overhead is the airline type trimming tab control for trimming the ship in the air. A 12-gal. aluminum fuel tank is set ahead of the instrument panel, and additional fuel is carried in a 5-gal. auxiliary container accessible for refueling from the outside.

Landing gear is the dual action oleo tripod type, which cushions rebound. Firestone low pressure tires and Shinn

hubs are used. Fuselage, aluminum covered aft, is faired smoothly by means of plywood, bulkheads and spruce springers. Wings are of conventional two-spar design, with truss-type spruce ribs used throughout. Standard instruments include tachometer, oil pressure, oil temperature, altimeter, air speed indicator, and dual wheel and rudder controls.

MANUFACTURER'S DATA

Wing span	36'
Length	21'
Height	6' 7"
Empty weight	650
Gas (12 gals.)	72
Oil (4 qts.)	8
Pilot	170
Passenger	170
Baggage	40
Miscellaneous equipment	20
Useful load	480
Gross weight	1,130
Wing loading (lbs./sq. ft.)	6.68
Power loading (lbs./hp.)	22.6
High speed	100 mph.
Cruising speed	90 mph.
Landing speed	32 mph.
Rate of climb	550' 1st min.
Glide angle	10 to 1
Service ceiling	14,000 ft.
Cruising range	250 miles

County Supports Airport

Wheeling, W. Va., Aug. 17—The Ohio County board of commissioners yesterday pledged its complete cooperation in helping Wheeling to secure a new \$1,500,000 airport. It is planned to locate the field near the Ohio-Brooke County line. The major portion of the money will be furnished by the federal government.

Wants Name Changed

Los Angeles, Aug. 15—Mayor Shaw has recommended that the name of the city's municipal airport at Inglewood be changed from Mines Field to Los Angeles Airport.

S. C. Model Airplane Ass'n.

The South Carolina Model Airplane Association, sponsored by the South Carolina Aeronautics Commission, was formed at Greenville, S. C., on Aug. 17, according to E. F. Markwood, assistant director of the Commission.

Complete Runway

Oklahoma City, Aug. 10—The new 4,500-ft. runway at Municipal Airport here was finished yesterday, assuring completion of the remodeled runway arrangement by the end of August. The new runway will not be put into operation until the sides are completed.

Cub Chases Coyotes

Hunting coyotes with a Piper Cub and a sawed-off shotgun is the new and somewhat different job in which Lemoin Stevens of Gooding, Idaho, is engaged. Stevens flies at an altitude of from 15 to 25 ft., opens the cabin door, and takes pot shots at the destructive animals. Ordinarily it is necessary to collect the pelt or tail of the dead coyote in order to collect the bounty, but Stevens leaves this job to ranchers working in collaboration with the Sheepmen's Association. The pilot collects \$7 a day from the ranchers and the Association for his work. The Association makes a profit on the bounties and the ranchers profit because the coyote is very destructive. So the coyote is the only loser in the transaction.

Indianapolis Show

Attracts 25,000

Indianapolis, Ind., Aug. 14—Approximately 25,000 persons today witnessed an air show held at municipal airport, sponsored by West Side Citizens, Inc., a federation of civic groups. Nish Dienhart, airport manager, said it was one of the largest and best managed exhibitions in local history. The Navy was represented by three Grumman fighters and three Berlinger-Joyce observation ships, all from Chicago.

Registration was in charge of Frank Joyce. Aerial observer for the BAC was Dan Moulton. Gene Genaro, of the local port, was in charge of radio traffic system, and Don Stremmel was field announcer. George Walker was field starter and Major Kenneth McGregor, 109th observation squadron, was aerial starter.

New models of aircraft by Stinson, Taylorcraft, Dart, Piper Cub, Waco, Beechcraft, Rearwin, Aeronca and Porterfield were exhibited. Robert Murnan, Indianapolis, demonstrated his Pitcairn autogiro. Those on the stunt program included Miss Helen House, Rochester airport manager; Mike Murphy and the Linco Flying Aces; Bill Moose, Ed Leach, and Earl Stein. Miss Mary Margaret Brouhard was queen of the show. Among the visitors was Maj. Jimmy Doolittle. Manager of the project was James I. Shockley. About 35 visiting flyers attended.

New Airport Directory

Harrisburg, Pa., Aug. 12—The Pennsylvania Department of Aeronautics is preparing a revised edition of its State Airport Directory which will include a map of each airport and surrounding territory. When completed, it will be sent to every licensed pilot in the commonwealth.

Catholic Air School

Lockport, Ill., Aug. 23—Work is now under way on the 160-acre Lockport Municipal Airport, which is to be used by the Lewis Holy Name Aeronautical School, founded to afford poor boys with exceptional mechanical ability an opportunity to learn aviation. The field will also be open to the public. The WPA is undertaking runway and other construction work. No tuition is charged at the school, and entrance is through competitive examination. Eight airplanes will be used in instruction. F. J. Lewis is the donor for whom the school is named.

Little Rock's Bargain Hangar



This giant hangar has been transplanted to Adams Field, Little Rock, Ark., from Waynoka, Okla., where it was erected back in the 20's when the latter city was a transfer point for air-rail transcontinental passengers. When night flying began, Waynoka ceased to become an air center and the hangar loomed up on the prairies for years, forgotten and unused. Little Rock citizens went bargain hunting, bought it, and now have an excellent hangar at comparatively little cost. (WPA Photo)

The **HYDROMATIC** *propeller...*

THE shining dome of the new HYDROMATIC quick-feathering propeller has already become a familiar sight in American aviation. Five major United States air lines have either installed it as regular equipment, or have entered production orders.

Only the Hydromatic propeller offers: (1) a quick-feathering action; (2) a principle of operation utilizing the fundamental forces of oil pressure and centrifugal moments; (3) a complete system of pressure lubrication; (4) a basic type of construction that has been proven structurally sound during millions of service hours.

HAMILTON STANDARD PROPELLERS

ONE OF THE FOUR DIVISIONS OF
UNITED AIRCRAFT CORPORATION

EAST HARTFORD, CONNECTICUT

Improved Radio Telephone System To Be Installed on New DC-4's

Western Electric Equipment Makes Possible Observations of Beacon, Weather, Marker Signals While Holding Two-Way Communication With Ground

Radio telephone equipment which is being installed on the new Douglas DC-4 will, for the first time, enable the flight crew to make simultaneous observations of the beacon, weather and marker signals while holding two-way communication with the landing field, according to announcement by Western Electric Co., manufacturers of the instruments.

This equipment was originally developed by the Bell Telephone Laboratories, Inc., for Western Electric. Specifications were submitted to the Bell Laboratories by United Air Lines, American Airlines, TWA, Eastern Air Lines and the Douglas Aircraft Co.

All power for the 250-watt equipment, which is five times more powerful than conventional airplane transmitters, is supplied from the ship's 800 cycle auxiliary lighting plant. During flight the pilot may talk over any one of 10 different frequency bands, and a direction-finding loop enables him to check the ship's position with respect to ground stations. An intercommunicating system, which may be plugged into Bell lines when the plane is on the ground, connects the pilot, co-pilot, flight engineer and stewardess.

The major parts of the system form a panel which is located behind the co-pilot's seat and which is operated remotely from a master control column rising between the pilot and co-pilot. Transmitter; communication, beacon, auxiliary and marker receivers, and the intercommunicating system amplifier, comprise the unit.

Individual control panels, located at both flying positions, switch either headset independently to any or all receivers without affecting what is heard in the other headset. The individual panels also contain devices for switching the microphones either to the ship's transmitter or to the intercommunicating system, for signalling the various stations connecting with the system, for adjusting headset volume, and for placing the transmitter on the air.

As the DC-4 passes from one radio zone into the next, the transmitter and communications receiver to which it is geared are shifted progressively through five pairs of "day" and "night" frequencies, by means of a rotary dial on the transmitter panel. Instantaneous shift from day to night frequency is effected by a push-pull lever located on the master control column. New quartz plate oscillators hold the several frequencies within required limits and a forced draft ventilation system cools the active elements of the transmitter with filtered air.

Provision is made in the beacon receiver for reception on either a conventional single wire antenna located beneath the fuselage, or from the shielded direction-finding loop enclosed within the plane's nose. The receiver is continuously tunable between the frequency limits of 195 and 415 kilocycles by means of an illuminated dial on the control column, which also contains the sensitivity control knob and an indexed dial showing the loop position.

An auxiliary receiver, which may be operated from battery supply in the event of power failure, covers all the frequencies to which the pilot would normally have occasion to listen. Marker stations are indicated by a series of colored signal lights which appear in

the cockpit and which may be augmented by an audio signal heard in the headset. The crystal-controlled superheterodyne receiver requires no operating attention during flight.



W. E. Reichle, Bell Telephone Laboratories engineer, is shown testing the radio telephone system aboard the Douglas DC-4. The flight engineer's seat beside him swivels into position on a semi-circular track mounted on temporary wooden flooring. All units of equipment slide like drawers into a special rack, and connections are completed through plug-in cables which may be seen extending from a vertical conduit beyond the apparatus. (Photographs from Western Electric Co.)

Lt. Col. Olds Accepts B-15 Bomber for GHQ

Lieut. Col. Robert Olds, ace flyer for the GHQ air force, formally accepted the Boeing XB-15 super-bomber from Wright Field authorities on Aug. 6 for service use in the GHQ.

Col. Olds flew the ship to Langley Field and has since engaged it in various trials. The ship underwent mechanical tests at Wright Field and will now be tested for tactical purposes. Col. Olds reports the ship handles very much like the B-17's, but a ten-man crew will be used instead of the nine-man crew employed on the B-17's. The additional member will be stationed at the controls of the auxiliary power plant.

The problem of hanging the XB-15 has arisen and Col. Olds believes it will be necessary to develop some kind of plans for keeping the plane outside in all kinds of weather. It is too big to be kept in a hangar and planes of this size will have to be built to be weather-resistant, he said.



Shown here are five of eleven units of radio equipment which will be used permanently on the DC-4. The radio rack, to the right of the flight engineer's chair, holds (at top) the inter-communicating system amplifier; (next lower) the 250-watt transmitter joined through flexible shafting to the communications receiver below it. The auxiliary receiver is immediately to the left of the latter unit and below it is the beacon receiver. While in the air, transmission and reception on the ship are governed remotely by a master control column rising between the pilot and co-pilot. This unit is visible beyond the arm of the flight engineer's chair.



E. A. Post, communications engineer of United Air Lines, inspects the DC-4's direction finding loop antenna. Two additional receiving antennas are installed beneath the plane and the radiotelephone aerial consists of a single wire stretching above the 42-passenger cabin.

Airport Flooded a Week
Norwood, Mass.—Metropolitan Airport operated by E. W. Wiggins Airways, Inc., has been drained and dried out and debris cleared away following a flood which covered the field for a week. A seaplane landed and took off from the field while it was covered. Flying operations were resumed Aug. 7.

Syracuse Picnic
Syracuse, N. Y., Aug. 10—The annual picnic of the Syracuse Aeronautical Association was held today. The committee in charge was composed of Edward J. Whalen, chairman; Harold Rubin, Herman A. Ecker, William Churchill, Merrill Phoenix, Fred T. McGlynn, John Pratsky, Donald V. Case and John Flaherty.

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Marine and Navy Flyers Head for Races



Fighting Squadron Five, Navy, attached to the aircraft carrier *Yorktown*, will join the Marine group in presenting an exhibition at Cleveland. Squadron Five comprises 18 single seat Grummans, designated F2F-1. It is commanded by Lieut. Commander W. L. Rees, Executive officer is Lieut. N. W. Ellis.

Shown left to right are: Aviation Cadet J. S. Wilson, USNR; Aviation Cadet T. W. McKnight, USNR; Lieut. F. A. Dolan, USN; Aviation Cadet H. W. Harrison, USNR; Lieut. F. K. Slason, USN; Aviation Cadet R. J. McCullough, USNR; Lieut. R. K. Johnston, USN; Lieut. J. G. Howell, USN; Aviation Cadet M. T. Leonard, USNR; Lieut. Comdr. W. L. Rees, USN; Lieut. N. W. Ellis; Lieut. T. A. Ahroon, USN; Lieut. W. A. Dean, USN; Lieut. T. B. Neblett, USN; Aviation Cadet J. M. Boehm, USNR; Lieut. J. K. Averill, USN; Aviation Cadet E. O. Carmody, USNR; Aviation Cadet W. B. Bails, USNR. (Official Photo, U. S. Navy).



These members of Marine Fighting Squadron One of the Fleet Marine Force, Quantico, Va., will participate in demonstrations at the National Air Races. Their ships are single seat Grummans, designated F3F-2.

Standing, left to right: Sgt. Arnold G. Fisher, Memphis, Ind.; and the following Aviation Cadets: Max J. Volcansek, Eveleth, Minn.; Edward F. Miller, New York City; William A. Bygg, Oak Park, Ill.; Harry F. Baker, Minneapolis; Warren A. Phillips, E. Candia, N. H.; Thomas E. Mobley, Jr., Palatka, Fla.; Burnette A. Kempson, Charlotte, N. C.; George W. Nevils, Hopewell, Va.; Leon A. Ranchynski, Worcester, Mass.; Norman J. Anderson, Los Angeles; Tech. Sgt. Lee E. Roberts, Richmond, Va.

Seated, left to right: are 2nd. Lieut. Pelham B. Withers, St. Johnsbury, Vt.; 1st Lieut. Maurice T. Ireland, Manila, P. I.; 1st Lieut. John P. Condon, Houghton, Mich.; Capt. Luther S. Moore, Newtonville, Mass.; Capt. James M. Daly, Hartford, Conn.; Capt. Thomas B. White, Mt. Carmel, Ill.; Maj. William L. McKittrick, Greenville, S. C.; Capt. Edward L. Pugh, Chevy Chase, Md.; Capt. Harold W. Bauer, North Platte, Neb.; 1st Lieut. Marshall A. Tyler, Kingston, R. I.; 2nd. Lieut. Donald K. Yost, Princeton, N. J.; 1st Lieut. Edward E. Authier, Putnam, Conn. (Official U. S. Navy Photograph).



Lieut. Comdr. W. L. Rees (left), who will command Fighting Squadron Five of the Navy, at the races and Lieut. N. W. Ellis, executive officer, (Official Photo, U. S. Navy).

Reporting by Plane

The *Toronto Globe & Mail*, one of Canada's largest daily newspapers, is a consistent user of the airplane for special news coverage. On Aug. 16 it chartered two planes, one for an assignment in eastern Ontario, the other to Sault Ste. Marie in the opposite direction.

Name Legal Chairman

Santa Monica, Aug. 11—Robert N. Baker, president of the Junior Chamber of Commerce and an active member of the Santa Monica Bay District Bar Association, has been appointed chairman of the legal committee for the citizens' airport expansion committee. The group will seek to study legal problems which prevent enlargement of municipal airport.

'\$700 Safe Airplane' Project Goes Aground; Attached for Hangar Rent



Col. Ross E. Rowell, director of Marine Aviation, Bureau of Aeronautics, will attend the Cleveland Air Races, representing the U. S. Marines in addition to Fighting Squadron One, which will appear in formation demonstrations.



Major W. L. McKittrick, who will command Marine Fighting Squadron One at the National Air Races. (Official U. S. Navy Photograph).

One of the old Bureau of Air Commerce "\$700 safe airplane" projects has not only run aground but has hit a curious maze of legal complications. Result is that the Bureau's successor, the CAA, will probably never pay the \$15,000 contracting price agreed upon last year.

The ship is a tailless model which Management and Research, Inc., contracted to build for the Bureau back in June, 1937. Tom Huff and Tom Carroll held the major interest in the company. The Bureau agreed to pay \$15,000 when and if the plane was delivered, meeting certain performance requirements.

Original construction started at the Kellett Autogiro Company plant at Philadelphia and then John B. Stetson, Jr., chairman of the board of the Stetson Hat Company and former minister to Poland, became interested in the project financially and Analysis, Inc., was formed to take over Management and Research, Inc.

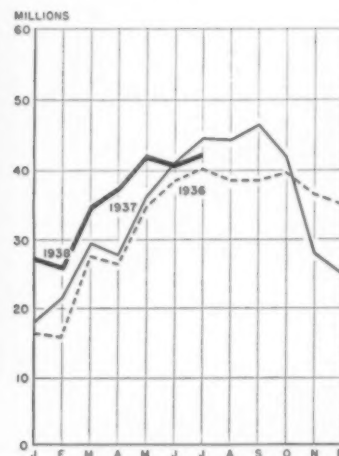
At one time or another Vincent Bendix put some money into the project for engineering costs, and Eugene L. Vidal, former director of the Bureau of Air Commerce, was interested in the company. It is said that Bendix was anxious to produce the plane at Bendix Airport, Bendix, N. J.

Finances became tight, and the ship was next transferred to the ownership of Tuscar Metals, Inc., New Philadelphia, O., and was taken there for final work.

At present the ship is in a hangar at Floyd Bennett Field, N. Y., where it has been attached for non-payment of hangar rental. Jimmy Taylor, test pilot who flew the ship on a number of occasions, hasn't been paid, according to reports, and the Kellett Autogiro Company has obtained a judgment for \$2,000 and costs against the various companies involved and against John B. Stetson, Jr.

Further complicating matters is the fact that the Bureau owns the Menasco engine and most of the plane's instruments, but because of the various attachments against the plane, it may have trouble claiming them. The ship never reached the final testing stage so the Bureau hasn't been able to determine whether it can pay the \$15,000.

REVENUE PASSENGER MILES FLOWN



July, 1938: 42,208,362



Col. Roy S. Geiger, regular commanding officer of Aircraft One, Fleet Marine Force, will fly from Quantico, Va., to witness the Races at Cleveland. (Official Photo, U. S. Navy).

FOREIGN

British Claim Longest Air Routes; Forget to Compare Passenger-Miles

Empire's 80,000 Miles of Scheduled Airlines Compare With 63,656 for U. S., But America's Passenger-Mile Total Leads by 549,628,407 to 49,705,000

Using figures for 1937 recently computed by the department of civil aviation of the British Air Ministry, a release from Imperial Airways reports that "the British Empire still leads the world in air route mileage in regular operation," with "approximately 80,000 miles."

The United States appears in decided second place on the British list, with 63,600 miles. France's rating is 38,750, Germany's is 31,900, Italy has 19,450, and the Netherlands is said to operate 19,000 miles. It is pointed out that the Empire's air route mileage figure for 1937 showed a 17% rise over that of 1936.

The announcement, however, does not continue its world comparisons with respect to passenger-miles, of which the Empire flew 49,705,000 in 1937 as contrasted with the world-leading U. S. figure of 549,628,407 for scheduled

operations. The American total includes 476,603,165 domestic and 73,025,242 passenger-miles flown by U. S.-owned lines outside this country.

American figures were taken from the May 15 issue of the *Air Commerce Bulletin*, showing American mileage as 63,656 at the end of 1937. CAA figures at the present time reveal a total of 68,067, of which 329 represent mileage of Hawaiian lines.

Washington observers emphasized that air services in all British possessions are encompassed in the report from the other side, and added that frequency of service should be considered in any comparative picture of activities under the two flags. The British operate a considerable number of long lines with service as infrequent as once every week, it was said, whereas a high percentage of U. S. schedules call for daily planes.

It is believed that a survey showing comparisons of mileage and frequency for leading countries of the world will be drawn up shortly by the CAA, which would present the case for the U. S. in scheduled air transportation. No other country, for example, can approach service such as that offered air travelers (and mail) between New York and Chicago, and between the east and west coast.

About half of the Empire's gain in 1937 mileage over 1936 is attributed to extension of lines in South Africa and Australia, the latter now operating regularly 28,000 miles of air routes. Canada, too, is increasing its mileage, claiming "more than 14,000 miles" in regular operation. Thirty services link the Arctic circle with railway terminals south. New Zealand closed 1937 with 1,600 miles of air lines; South Africa had 6,000 miles, and India reports 7,600 miles.

The report also reveals that the Empire had 2,000 commercial pilots, 3,000 mechanics, 7,500 private pilots, and a total aircraft registration of 3,140 at the close of the year. In the U. S. on Dec. 31, 1937, there were 18,745 certificated pilots; 9,314 mechanics, and a total aircraft registration of 9,152.

FRANCE—Although much shorter in distance, the London-Paris route is perhaps more competitive than our New York-Chicago route. Imperial Airways has held a safe lead over her two chief competitors, Air France and British Airways, for some years and in 1937 carried 38,839 passengers to Air France's 29,991, and British Airways' 12,662. But with the introduction this year of the Marcel Bloch 220's, 16-passenger transports with trim, clean lines, Air France has taken the lead on this highly-traveled route. If the present monthly lead continues, Air France will be ahead in 1938 by as large a margin as Imperial was last year.

Return Passage Plan

American companies may be interested to know how Air France manages its round-trip tickets. On the eastern service to Indo-China, Air France now has a new ticket form for one-way trips which contains a return passage certificate calling for a rebate if the passenger decides to return by air. This makes the return trip dis-

Mayo Outlines New Composite Land Plane

Construction will start soon on a landplane version of the British composite ("pickaback") aircraft, Major R. H. Mayo, inventor, has revealed. The new machine designed for Atlantic flying, will cruise at about 270-mph. against a 40-mph. headwind, and its conservative range will be 3,500 miles. As a safety precaution the mail-carrying upper unit will be able to alight on water and remain afloat in emergency. Like its predecessor, it will have four engines, but will be highly streamlined with retractable landing gear. It will be able to maintain flight at the start of its journey on any three engines, and in mid-Atlantic, with load lightened by fuel consumption, will fly on any two motors.

"Introduction of landplanes on the trans-Atlantic mail service is desirable because the Canadian rivers and the sea around Newfoundland are encumbered with ice for approximately six months of the year," says the bulletin of the Society of British Aircraft Constructors. "Further, the floats of a seaplane considerably retard progress through the air. Major Mayo estimates that the floats of the Mercury retarded her speed by some 50-mph."

London-Sydney Line Opened by Dutch

When Intercontinental Airways, a combination of KLM Royal Dutch Air Lines and KNILM Royal Netherlands Indies' Airways, opened service between London and Sydney, Australia on July 1, it marked the end of years of negotiations with the British for permission to fly such a route.

Intercontinental's twice-a-week schedules, which are operated with American-built Douglas and Lockheed planes, are two days faster than those flown by the British, reaching Sydney in eight days. At Batavia, capital of the Netherlands East Indies, passengers are transferred to KNILM planes, which operate the Batavia-Sydney section of Intercontinental Airways.

The two Dutch companies are not connected financially or otherwise.

To Enlarge Irish Plant

The British Air Ministry has approved an addition and machine shop costing approximately \$750,000 to be added to the Short and Harland aircraft factory at Queen's Island, Belfast. The present payroll of 3,000 probably will be double when full production is reached.

count available without the necessity of purchasing a round-trip passage in the first place.

BRITAIN—The British are pushing development of sleeve-valve power, with several engines in production. Advantages claimed are higher efficiency, elimination of valve maintenance, reduced lubricating oil and fuel consumption, less mechanical and exhaust noise, and less fire risk (because exhaust manifolds do not heat as much as in poppet-valve engines). "Increase in efficiency is considerable. Burning the same fuel, the sleeve-valve engine is stated to operate smoothly at one compression ratio higher than the comparable poppet-valve engine," says the Bulletin of the British Aircraft Constructors. The first complete Bristol sleeve-valve engine (9-cylinders, air-cooled, radial) was built in 1932. The largest unit, a 14-cylinder Hercules, gives up to 1,375-hp. Each of the new Short 32-ton airliners will have four such engines.

Trans-Canada Expects U. S. Tourist Trade

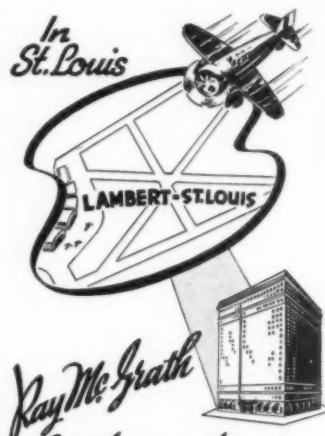
Officials of Trans-Canada Air Lines are expecting an important and consistent stream of American travelers over the transcontinental route after it opens next year. The natural appeal of a new service over strange lands will result in decision of air travelers from this country to make at least half of their coast to coast circle tours on TCA, the Canadians believe.

Further, TCA sees a growing popularity of the circle tour for the future and believes the scenic attractions of the Canadian Rockies, as well as the already well advertised route of United along the U. S. Pacific coast, will act to the advantage of the new system. TCA claims a lower mileage of over-mountain flying than any other North American trans-continental airline, and in its advertising is expected to capitalize on the peculiar terrain which includes narrower mountain ranges than in this country, and wide, flat valleys and plains between them.

Circle tours, in which the traveler would make one trip on TCA and the other on one of the American systems, will be advertised generously. United's Pacific coast airway from Vancouver and Seattle to Southern California is seen as a potential profitable feeder to and from the new line.

Netherlands Airlines Extends

The Netherlands Airlines on Aug. 30 opened a new extension connecting Australia and Java with the Eastern Asiatic continent. The new line reduces the journey from Sydney to Saigon to two days, while one more day is required to connect with lines covering China and Japan.



Ray Mc Grath

Invites you to enjoy
the Hospitality
of the

**HOTEL
MELBOURNE**

"Where Lindell Crosses Grand"



**Air-conditioned Rooms
from \$2.50**

**Phone your reservations from
the field
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NAZI LANDPLANE SPANS SEA TWICE

Lufthansa 26-Passenger Transport
Completes Berlin-New York
Round Trip Aug. 11-14

One of the most significant round-trip trans-Atlantic flights in history was completed on Aug. 14 when a German four-engined, 26-passenger Focke-Wulf landplane, Brandenburg, manned by a crew of four, flew nonstop from New York to Berlin in 19 hrs. 54 mins. The plane had arrived in New York from Berlin (non-stop) on Aug. 11, making the east-west crossing in 24 hrs. 58 mins., averaging 150 mph. for the 3,985-mile trip.

Captain Alfred Henke, first assistant to the Atlantic division manager of Lufthansa, was in command of the monoplane, and his crew was composed of Rudolph von Moreau, second captain; Paul Dierberg, flight engineer, and Walther Kober, radio operator. Dierberg and Kober are also employed by the German airline, while von Moreau is an officer in the German Aviation Corps. He was the only crew member who had not previously flown the Atlantic.

The plane is owned by the Focke-Wulf Manufacturing Co., sponsors of the trip, but the crossing will be counted as one of the 14 survey flights being conducted this summer by Lufthansa.

The all-metal, low-wing Condor-type monoplane is 78 ft. long, has a wing spread of 108.4 ft., and a gross weight of 38,720 lbs. Power is furnished by four Pratt & Whitney Hornet engines, each capable of developing 720 hp. Any two of the engines, which are manufactured in Germany under license by the Bavarian Motor Works, will keep the plane in the air, and with all four operating, the cruising speed is about 200 mph. The ship is equipped with retractable landing gear and variable pitch metal propellers.

Communication apparatus on the plane includes a 150-watt long wave radio transmitter and receiver, a 20-watt Lorenz short wave transmitter and receiver, a Telefunken homing device, and a receiving set for radio beams.

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"My skies are always filled with ships
..... Vespers of broken wings
Wheeling through cadences of time
In deep concentric rings;
Their landing fields the hangared years
From which they rise to fly
Each time I lift my wistful face
To contemplate the sky."

THE AVIATION PUBLISHING ACHIEVEMENT OF THE YEAR

"Leaves From An Old Log," a volume of poems by Gill Robb Wilson, comes from the press September 1 in a limited, de-luxe edition available only by subscription to a carefully chosen list.

Poems that bring back vividly the magnificent achievements of the Air Forces in France—poems that talk of routine affairs of airline pilots and hostesses—poems that speak of racing, and planes both old and new, radio, helmets, and equipment—songs of mountains, and sky, and morning, and sunrise, of people and prayer, the living and lost, of fogs and bright weather—all the things that comprise the picturesque epic of aviation history . . .

A book that will thrill the connoisseur of fine volumes—the connoisseur of lyric literature—the persons who are devoting their lives to aviation—the persons who are on the sidelines, but aviation-minded . . .

What Kipling did for India—what Robert W. Service did for the Yukon country—today has been done for aviation in this volume. A commercial edition will be distributed to the general public later this year.

AMERICAN AVIATION ASSOCIATES

AMERICAN AVIATION

The Independent Voice of American Aeronautics

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FORTNIGHTLY REVIEW

(Continued from page 1)

All it wants is a sympathetic, helpful, and intelligent recognition, which it deserves.

The Races Again

ONCE more the year's high point of the racing season is at hand, with Cleveland host to the multitude of enthusiasts who each year get stiff necks and sun-burned eyebrows from watching the grand show put on under the aegis of the Henderson brothers.

AMERICAN AVIATION has but one suggestion in respect to the National Air Races. Rather a sincere wish than a suggestion, for that matter. And that wish and hope is that the Hendersons will continue their usual discretion in the matter of the closed course races, with special regard to the weather.

For the National Air Races form too splendid an exhibition to permit any relaxation of control in the interest of safety. Here's to a successful meeting!

Lesson: 6 Million Railroad Passes

THE Civil Aeronautics Authority should face realistically transportation history on the free pass question and prepare a set of regulations that leave little chance for competitive tricks between the scheduled airlines.

Although legislation long ago ended wholesale issuing of railroad passes, the following story from the *Dallas News* makes us wonder what some of the smarter boys in the air transport industry may try to do. We know that the majority of airline executives desire to act in good faith under the CAA and we urge the Authority to help them avoid a handicap when so doing. We quote from the *Dallas News*:

"American railroads have been issuing free passes and tickets to persons other than employees at the rate of six million a year. Mileage on these passes amounts to more than five per cent of the total passenger revenue. It would be a much larger percentage if it included the free pleasure rides of the well-paid employees of the railroads.

"Dummy directors—business men placed on directorates for the sake of wooing freight patronage—are the worst pests of railroad officials in this respect. These dummy directors are given annual passes on the roads with which they are connected, but many of them insist on first-class annual passes for their families on all lines, sometimes with private cars for wedding trips.

"Legislation long ago ended the wholesale issuing of railroad passes to legislators and newspaper men. With the railroads now in bad financial straits, much might be gained by a more stringent policy that would end the issuing of passes to employees except when travelling on railroad business, and the dubious practice of naming lawyer legislators as railway attorneys and giving them passes. The passenger business of many rail lines would be out of the red if full fare were collected for every passenger carried."

Our Thanks to Wichita

THE EDITOR seems to remember that in these columns some months ago he severely took to task certain proprietors of airport restaurants who, in his humble opinion, were doing much to drive passengers to other forms of transportation, away from the luxury of the air lanes.

The point was that if it's smart, and comfortable, and speedy, and desirable, to travel by air, it ought to be all these things to eat at airport restaurants, particularly since many passengers are caught at certain times and have to eat there.

Since we much prefer to point with pride rather than to view with alarm, we now wish to speak in a large and pleasant way of the delight of sinking into a cozy chair in the airport restaurant at Wichita and quelling the riotous inner man with a tasty Kansas steak, done exactly as you wish it, surrounded with vegetables, salad, dessert, all excellent.

The chairs are covered in bright colors, the glassware is many-hued, the china is new and spotless, the place is bright with flowers.

All this is presided over by charming Mrs. Renee Holcomb, a pleasant group of waitresses, and you don't give much of a hang if your plane is late! It seems to us it ought to be just as easy to run a restaurant this way, and should be just as profitable, if not more so.

The Northwest Loses a Friend

NORTHWEST aviation lost a sincere friend recently when W. W. "Billy" Conner passed away in Seattle after a protracted illness. In every part of the nation there have been men who have worked unselfishly and without personal gain for the betterment of aviation. Conner was one of these men. He will be sorely missed. Aviation owes much to these public-minded citizens and Northwest aviation in particular owes a debt of gratitude to Conner which can never be paid. We hope the aviation leaders of the Northwest will see fit to honor his memory by some fitting memorial.

Grants for Private Flying

THE determination of England to encourage civil aviation by grants to private flying clubs, in the development of the Civil Air Guard, so-called, is a determination that should have its counterpart in the United States.

Not only would such a plan, through the subsidizing of civilian clubs, bring many more embryo pilots their certificates, but it would serve as a healthy shot in the arm for those manufacturers of civil aircraft who have had little encouragement from government in their struggle to grow.

In every state of the union, during the past few years, billions of dollars have been poured out for projects involving the instruction of men and women of all ages in every conceivable (and some inconceivable) activity, and it would not be inconsistent for the government at Washington to undertake generous grants to civilian flying clubs in order that a large potential reserve of pilots might be built up.

It is not the thought, according to those who have studied the problem, that a reservoir of military pilots be set up through the encouragement of civilian flight organizations. There are too many active uses for pilots and aircraft in time of peace to assume the military view. But it is certain that with governmental assistance in financing flight instruction that much larger strides can be taken by would-be pilots and manufacturers, to say nothing of the operators of the many fields now barely keeping their heads above water.

Pretty Pictures Aren't Planes

IT IS with profound regret that we note the passing of the 1938 summer season with still no U. S. commercial accomplishments on the Atlantic. True, Mr. Howard Hughes made a flight to Paris and Mr. Corrigan flew to Ireland, but this isn't what we call the conquering of the Atlantic by commercial air transport. Meanwhile Great Britain has continued its survey flights and the Germans showed us up with a very neat round-trip flight with a four-engined Condor landplane.

Something isn't right. We should be flying the mail across the Atlantic on at least weekly schedules. Let the passengers wait. We've heard promises galore for a number of years. First it was to be 1936, then 1937, and certainly by 1938. But the 1938 season has come and all but gone. The Germans say they are only waiting for a reciprocal American service. They want to carry the mail. We should be operating mail services to England, to France, to Germany, and to some Mediterranean port. It isn't necessary to carry passengers until the service is well established. The South Atlantic is a good illustration of what can be done with mail flying.

Great Britain has attracted much attention with its "pick-a-back" trial flights and now we hear that a larger-type four-engined flying boat, the *Cabot*, is also to make the hop. The Europeans are stirring up the air in great fashion. There should be grave concern in this country about our non-participation in the Atlantic this year. Let's not permit another year to pass without genuine results. The Atlantic can't be flown with pretty pictures of the distant future.

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Aviation Loses Comdr. Frank Hawks; Held 214 Point-to-Point Records

Lt. Comdr. Frank Monroe Hawks, renowned speed flyer and vice-president of the Gwinn Aircar Co., who, with J. Hazard Campbell, millionaire sportsman, was killed when a Gwinn plane hit a high tension wire and crashed near East Aurora, N. Y., on Aug. 23, had been associated with aviation since his first airplane ride at the age of 18.

Shortly after his birth in Marshalltown, Iowa, Mar. 28, 1897, his parents moved to California, and Hawks attended public and high school at Long Beach, later attending the University of California. In April of his sophomore year, after war had been declared, he entered the Army, and was sent to Love Field, Dallas, as a flying cadet. He never went overseas, however, being assigned to a training camp as instructor.

Resigning from the service, Hawks flew Jennies to advertise and deliver sporting goods. After attending an aviation training school and barnstorming, he signed a contract with the Mexican government to provide an air circus in connection with the national centennial. He remained in Mexico six years.

In 1927, he flew in a national air tour, and later joined the Texas Corporation. At his suggestion, the company purchased a Lockheed monoplane and equipped it with a 425-hp. Wasp engine. In February, 1929, he flew the plane from Los Angeles to New York in 18 hours, 21 mins., 59 secs., a new transcontinental non-stop record. In June of the same year he set two more records by flying from New York to Los Angeles in 19 hrs. 10 mins., and by making the return trip in 17 hrs. 36 mins.

In a specially-built low-wing Travelair monoplane powered with a supercharged Wright Whirlwind engine, he crossed the country in 11 hrs. 40 mins., 3 secs. actual flying time. He later flew from Detroit to New York in 2 hrs. 41 mins., Philadelphia-New York in 20 mins., and Washington-New York in 58 mins.

In 1930, Hawks received the Harmon Trophy, awarded annually to the nation's outstanding aviator, and the Ligue Internationale des Aviateurs named him "America's outstanding flyer." Also in 1930, he made the first transcontinental glider flight, in tow of an airplane, from San Diego to New York in 36 hrs. 47 min., with many stops on the way.

On Apr. 7, 1932, the flyer was seriously injured when his small plane crashed while taking off at Worcester, Mass. In June, 1932, he joined the naval aviation reserve unit with the rank of Lieutenant Commander.

In 1935, Hawks resigned from the Texas Corp. to design a new plane with Howell Smith. In this ship, named *Time Flies*, Hawks flew from Hartford, Conn., to Miami, Fla., in 4 hrs., 55 mins., and then back to New York in 4 hrs. 21 mins. The ship was badly damaged in a rough landing at Newark, and Hawks retired from speed flying. In September, 1937, he joined the Gwinn Co. as vice-president in charge of sales.

Among Hawks' European records are the following: London-Rome, 5 hrs. 22 mins.; Paris to Heston, England, 59 mins.; London-Berlin, 2 hrs. 57 mins.; Malmö, Sweden to Paris, 3 hrs. 15 mins.; Berlin-Hamburg, 58 mins., and a round trip between London and Rome, 9 hrs. 40 mins. All together, he is said to hold 214 point-to-point speed records in the United States and Europe.

Recently Commander Hawks had built up a large following among air minded youngsters who listened to his NBC programs detailing his flying experiences and news of the Junior Birdmen. He was vice-president and

assistant national director in charge of organization for the youth group.

His ashes were flown from Buffalo in Hawk's plane by Mack R. Carlin, the commander's former roommate and flying companion, and were buried in Redding, Conn. Commander Hawks is survived by his widow and stepson.

W. W. CONNOR DIES; FRIEND OF AVIATION

Seattle Civic Leader Did Much for Air Interests in Northwest

Seattle, Aug. 10.—Aviation lost one of its most devoted friends yesterday in the death in a local hospital of W. W. "Billy" Connor, prominent insurance broker. He had been seriously ill for several months following a breakdown in his health which occurred during the campaign he staged some months ago for a seaplane base on Lake Washington.

Since coming to Seattle in 1916, Mr. Connor took an active interest in developing aviation in the Pacific Northwest. He was for some years governor for the National Aeronautical Association and chairman of the Seattle Chamber of Commerce aviation committee. He had a long career in the state legislature, representing Skagit County for three terms in the House, and four terms in the Senate. He was active in the Catholic Church. His death occurred on his 33rd wedding anniversary.

"His was a spirit exalted above that of most men," the *Seattle Times* said editorially. "Courageous, genial, generous, it was his voluntary mission to labor for the public good. His long and personally unremunerative career in legislation is marked by much of enduring benefit."

Parachute Champ Killed

James Williams, world champion parachute jumper, was killed at Lons-le-Saunier, France, Aug. 14, when his parachute failed to open. Williams, whose real name was Jacques Dilaud, plunged to his death from an altitude of 4,000 ft. He holds the world record with a jump of 36,000 ft.

JAYSON (JAY) BURKHOLDER,

32, Galena, Ill., former Kewanee, Ill., airport manager, died after a crash near Dodgeville, Wis., Aug. 6. He had been in aviation for 13 years, as airport manager, barnstormer, and flying instructor. He is survived by the widow and two children.

Aero Library

AERONAUTICAL (MODEL AIRCRAFT) DEFINITIONS AND NOTES, compiled by Harry G. Vogler, Jr., instructor for WPA, for use in WPA recreation classes, Allegheny County (Pittsburgh), Pennsylvania. Mimeographed. 27 pages.

Although prepared for interested youth who expect to build model planes, this compact work is equally valuable for adults. In addition to a comprehensive listing of terms there are printed the international registration assignments for all countries of the world, the letter designations as to plane type and manufacturer as announced by the Navy and Army, and a brief description of the Army's procurement system.

Folks Worth Meeting—

CRUILL HUNTER, president and general manager of Northwest Airlines, Inc., entered



the air transport industry from a business and financial career.

A Yale graduate, he entered business through the credit department of the Fargo, N. D., Mercantile Co. of which his father, the late J. C. Hunter, was one of the founders. He

had not been at this work long until he left to serve in the Army during the War. For two years he was captain with Battery F, 138th Field Artillery, and in 1919 he returned to the Fargo Mercantile Company as treasurer.

For ten years he held this post at Fargo. Then he became eastern representative and New York manager for the First Bancredit Corporation, affiliate of the First Bank Stock Corporation.

In March, 1932, Mr. Hunter was called to Northwest Airlines as general traffic manager, and the following year became vice-president and general manager. He was named president in June, 1937.

Under Mr. Hunter Northwest has grown in stature. It has added Portland, Ore., as a second western terminal, and it was the first line to purchase the

new fast Lockheed 14's. It's Chicago-Seattle operations have shown a steady traffic growth.

Cruill Hunter has been one of the most active members of the air transport industry. He represents his own company in Washington, and is never without ideas at meetings of the lines. His problems in directing Northwest have not been the most difficult in the industry, but they have been far from the easiest. Hemmed in by a transcontinental route on the south and the Canadian border on the north, Northwest has had to dig hard for its passenger traffic. With the new Trans-Canada Air Lines in the offing, these problems will be increased rather than decreased.

The industry admired Mr. Hunter's courage in launching a re-equipment program during a difficult period, and few would want to cope with the operations problems he faces. The need for fast service was evident, which meant replacing or supplementing the Electras. Yet Northwest cannot neglect the smaller communities on its route and frequent stops don't make for fast express service. A rather liberal mail pay—relative to mail pay to other lines—has been an invaluable aid in the development of the company. Dynamic, able, opinionated, Cruill Hunter himself has done much to make Northwest one of the best known lines in the country, and on his shoulders alone has rested the bulk of responsibility for the line's development.

Mystery Surrounds Disappearance of Clipper; No Wreckage Found

Disappearance of Pan American Airways' Hawaii Clipper at sea on July 28 is currently considered one of the major mysteries in aviation history. No trace of the lost plane has been discovered, despite the fact that Pan Am, the Army and the Navy have combed over 150,000 sq. mi. of the Pacific Ocean.

The only clue discovered to date is a large spot of oil, and even this has not been definitely connected with the ship's disappearance. A hasty analysis of the oil failed to reveal whether it had been used in a plane, and further tests are being conducted in New York.

The fact that the Clipper suddenly lost all radio contact with the shore would seem to indicate a crash rather than a forced landing, officials believe. The planes are equipped with duplicate radios, so that if one becomes inoperative it is still possible to carry on communication with the other. In addition, a gas generator is carried and can operate the radio in the event of power failure. The life rafts are also equipped with small radio sets.

However, when considering the possibility of a crash, the absolute lack of wreckage presents another question mark. In all former crashes at sea, much wreckage has always been discovered. Pan American officials, highly praising the thoroughness of the search conducted by the Army and Navy, feel certain that those agencies would have recovered any floating debris.

Although there seems to be nothing but an oil spot to "investigate," the Bureau of Air Commerce sent an accident investigation board to the west coast. Robert D. Hoyt, BAC aeronautical inspector; Phillip C. Salzman, BAC airline maintenance inspector, and William T. Miller, BAC airways superintendent, international section, are members of the board. Colonel W.

Sumpter Smith and Thomas Hardin, of the C.A.A. safety board, are advisory members, but did not make the trip. The board will probably confine its investigation to the pilots' records, history of the aircraft and other similar details.

Enyarts in Bermuda

William R. Enyart, secretary of the National Aeronautic Association, and Mrs. Enyart spent two weeks in Bermuda during August.

Pro Con and Otherwise

Yellowstone Park, Wyo.
Aug. 19, 1938

To the Editor:

As a frequent air traveler not connected with any large company, I am writing you regarding the abominable discrimination in fares shown by the major airlines of the country to the users of so-called "scrip," which is, in fact, not in any sense of the word scrip, but is merely a charge account for favored large organizations, upon which they are granted a discount on air transportation.

This is a practice which should be one of the first objectionable things to be remedied by the new Civil Aeronautics Authority, as it is a direct violation of every economic law, due to the fact that users of credit for the purchase of everything but air transportation pay more, not less, for credit.

I hope that your excellent publication will continue to give this subject the airing that it deserves.

Very truly yours,
Schuyler W. Rogers.

AIRLINE TRAFFIC

Delta Cuts Fluff from Its Ads; Tells Where, When and How Much

Simple but Direct Advertising Appeal Brings Results, Give Public Information It Wants at Glance

(Editor's Note: This is the second of a series of articles about Delta Air Lines.)

Long ago Delta Air Lines stopped worrying about what the other airlines were doing and began concentrating on its own peculiar problems with its own methods.

The result has been a steady increase of on-line passengers and far less dependence on what the "other guy" was going to send from distant points. In May, 81.5% of Delta's passengers were ticketed by the company and only 18.5% were ticketed by other carriers.

Delta stopped trying to publicize a "pullman passenger" long-haul business with de luxe service. It began developing on-line business—pioneering a new mode of transportation in a part of the country that is far away from the highly-populated metropolitan centers.

Laigh C. Parker, Delta's general traffic manager, is not only one of the most energetic and imaginative traffic men in the country, but he is articulate in his sales philosophy. And he is particularly articulate when it comes to advertising.

Delta's advertising has followed a very consistent policy. It is a policy that has no room for fluffy sales arguments about safety devices, about scenery, about de luxe Pullman comforts. It is a simple sales philosophy bound up in one phrase: "What we have to offer."

Whenever you see a Delta newspaper advertisement, you can be sure that these three essentials are always uppermost:

1. Where we go.
2. What time we leave.
3. What it costs.

There may be a small description of the equipment, but sometimes even this is left out. The name of the airline itself is not emphasized.

"We don't play up Delta until after we have given the reader the information we want to get across," Parker says.

In brief, Delta is hammering home in its advertisements the cities served by its route, the times of departures (and time en route), and the cost. There are many in the industry who will agree with Delta's policy. They

are many who will say that the airlines have missed the most effective sales appeal by failing to play up these three essentials. And there are those who will disagree, but the answer in the end is results, and Delta's traffic figures have proved that an airline can build up the short to medium haul business by running a method of transportation and not a circus.

Delta's advertising budget is carefully handled. Five per cent of the passenger revenue is expended on passenger advertising. An additional 2% is expended for direct mail, counter cards and occasional spot radio announcements. But the 5% figure remains at all times and although it does not make for huge advertising displays, it does get Delta's three-point messages over to the public frequently and consistently.

Laigh Parker believes that if the airlines are to sell transportation, they must tell the public what the public wants to know—the three facts listed above. It is a direct sales appeal. Although he didn't say so, Parker undoubtedly feels that the public hears too much about airlines and not enough specific information about destinations, departure and arrival times and—and this particularly—the cost.

Direct mail advertising has been confined to those who control a considerable amount of travel, such as agencies; those who do considerable travel but not by air; and the past passenger list well sifted to weed out the one-time rider except for occasional appeals.

On appeals, Delta has studiously avoided any comparisons with other carriers, regardless of how tempting this might be. This means railroads particularly. For slogans, Delta has developed a number. One of the best has been "Southern Air-istocracy." Others are "Wings Over Dixie" and "the Trans-Southern Route."

Inland 'Mercy' Flight

Cheyenne, Aug. 21—Kenneth Turner and Lee Osborn, Inland Air Lines pilots, performed a "mercy" flight early this week, when they flew R. W. Ward, Calgary, Alberta, businessman, from Calgary to Rochester, Minn., for medical treatment. The pilots were notified of Ward's serious illness while on their way from here to Great Falls. Completing their regular run, they flew into Canada, picked up Ward and rushed him to Rochester, where he is now being treated.

TWA Continues Ranch Parties

Following a successful ranch party sponsored last fall by TWA in New Mexico, the line is going ahead with plans for an annual program. Low all-expense rates have been arranged to cover all transportation and charges at the three ranches which are 75 miles northeast of Albuquerque. Activities will include typical western entertainment and fishing, riding and shooting. A banquet in Albuquerque Sept. 18 will conclude the party. Gov. Clyde Tingley of New Mexico is cooperating and will present credentials to each tourist signifying membership in what TWA has named "Conquistadores del Cielo" (Conquerors of the Sky).

W. J. Austin to Handle TWA Nat'l Accounts

William J. Austin, formerly vice president in charge of traffic for Pennsylvania-Central Airlines, was recently appointed manager of national accounts for Transcontinental and Western Air, Inc.



Austin, a graduate of the University of California's school of aeronautics, received early training at Rockwell Field and March Field, later entering the Army Air Corps as pilot during the World War. He was an instructor and later was assigned to the 344th Handley-Page bombing squadron.

After the war, Austin spent two and a half years in Japan as steel salesman for a New York export firm. Upon his return to the United States, he opened a flying school in Pittsburgh, operating it during 1927 and 1928. In 1929 he joined the newly-formed Pittsburgh Aviation Industries Corporation as sales manager. This was the parent company of Pennsylvania Airlines, now known as Pennsylvania-Central, with which Austin was connected until he accepted his new position with TWA. He is now located in Kansas City.

Those Ambitious Gals



Here is Agnes Hermansen, petite and 23, who isn't satisfied with being a stewardess for United Air Lines. She insists on doing her own flying and has about nine hours solo. Trained at New England Baptist Hospital at Boston, she took nursing in order to become an airline stewardess, and now she's the second UAL stewardess to fly her own plane. The first was Helen Huntley, who has 500 hours and holds a transport license. Miss Hermansen has been with UAL six months.

Patterson Takes Personal Hand in UAL Advertising; Wants Human Interest

United Air Lines has begun a series of "human interest" advertisements in a few leading magazines. It is reported unofficially that W. A. Patterson, president of the company, is sitting in personally with his advertising department and agency and is responsible for the new theme underlying UAL ads.

Recent issues of *Time* and *Saturday Evening Post* have carried full page ads playing up UAL Mainliner captains as "solid citizens." An intelligent and contented looking captain is pictured on the lawn of his home taking a snapshot of his wife, children and the family dog, all grouped in front of the attractive white cottage.

The copy states that there was a day when a man who would fly for an airplane was considered an adventurer, a dare-devil. But that was when flying was "a stunt and not a highly-organized transportation industry." The ad also points out that the pilot or captain of today, after engineering courses in college, completes two years of intensive training in a modern flying school under the supervision of experts in airline operation, all topped off by hundreds of thousands of miles of practical experience as co-pilot or first officer before being given the responsibility of a captaincy.

Another part of the ad states that "the average captain of a United Mainliner is 33 years old. He leads the normal life of a professional man. He has a wife and children. He owns his own home. His income ranges between \$8,000 and \$10,000 a year depending on the length of service. He is quiet, conservative—a solid citizen."

Patterson is reported to want more human interest in UAL ads and also to establish in the minds of the public a professional status and understanding of the calibre of flight officers. He is said to believe that flight personnel can do

much to bring about general acceptance of air transport.

COMBINE UAL DEPTS.

F. E. Caldwell Is Assistant to V. P.—Operations in New Personnel Change

W. A. Patterson, president of United Air Lines, has announced the combination of dispatch supervision with the company's flight department, in order to consolidate all responsibilities connected with the actual flying of airplanes. He also announced the appointment of F. E. Caldwell, former director of dispatch, to the position of assistant to the vice-president in charge of operations. Other personnel changes include the appointment of the following as first officers: J. O. Ellis, O. F. Firth, A. D. Moore, L. M. Rohrbough and P. R. Larned.

A NEW NAME IN THE SKY

In the skies of eight great states, a new name is written. Hanford Airlines becomes Mid-Continent Airlines, pledged to progress, dedicated to service.

THE CHIEF LINE NORTH and SOUTH



Typical Delta newspaper advertisement illustrating simple but direct appeal of where, when and how much.

\$6.50
ONE WAY
58 MINUTES
to BIRMINGHAM

DELTA

MEMPHIS - 4:15 hrs. \$25.70 JACKSON - 2:15 hrs. \$18.50
AUGUSTA - 8:15 hrs. 7.00 DALLAS - 6 hrs. 28.50
COLUMBIA - 5:15 hrs. 15.00 ST. LOUIS - 8 hrs. 20.50
CHARLESTON - 5:50 hrs. 15.50 LOS ANGELES - 1:15 hrs. 115.00

Leave Westbound - 7:00 A. M. - 1:00 P. M. - 12:30 A. M.
Leave Eastbound - 2:30 A. M.
CITY TICKET OFFICE: 91 Forsyth St. N. W. ... W. About 1548
AIRPORT OFFICE: Phone CAlboun 2166

DELTA AIR LINES

Ingalls, O'Neal Resign Positions with AA

H. D. Ingalls, superintendent of maintenance for American Airlines, and Paul O'Neal, foreman of engine overhaul for the company, have resigned. Joe Martin, assistant superintendent of maintenance, has assumed Ingalls' post, and a successor to O'Neal has not been appointed. Reason for the resignations is not known at this time.

On Jan. 15, the Airline Engineers and Maintenance Conference at Dallas, Tex., judged Ingalls "the outstanding man in maintenance work during 1937" for all airline companies in the United States. Ingalls joined the Colonial division of American Airways in 1930. Prior to this he had been with a South American aviation firm, National Air Transport, Curtis Airplane Motor Corp., and Cunningham Automobile.

Pan Am Studies First Aid

Baltimore, Aug. 17—The Baltimore chapter of the American Red Cross yesterday opened a standard course on first aid for 30 flight and maintenance employees of Pan American Airways. The lessons, which are under the direction of Harry A. Veditz, volunteer first aid instructor of the local unit, are being given on the request of Pan Am. Classes are held every Tuesday from 1:30 to 3:30 p. m. at Municipal Airport.

United Plant Dedicated

Chicago, Aug. 17—United Air Lines' \$250,000 operations building at municipal airport was dedicated at noon today, as a feature of Chicago Air Week, sponsored by Mayor Edward J. Kelly's New Century committee. Barnet Hodes, corporation counsel, who is acting mayor, took part in the ceremonies. W. A. Patterson, UAL president, presided.

Bob Neff Cops Coveted Publicity Splurge for UAL: 12 Pages in Life

Honors thus far for pretentious and beneficial air transport publicity go to one of the industry's most energetic and suave purveyors of information, dapper New Yorkish Walter F. "Bob" Neff, the New York press agent for United Air Lines. Trained on the nation's economic Bible, the *Wall Street Journal*, Neff is perfectly attuned to the peculiar publicity requirements of snooty New York, possesses the smart Yale mannerisms which open doors closed to the less chosen of his profession, and rates as air transport's No. 1 economically-minded press agent.

It was Neff who copped the prize publicity splurge of the year—12 pages in *Life* (Aug. 22), the sanest and soundest pictorial story of modern air transportation ever to appear in a national magazine of *Life's* standing. It goes unsaid that the 12-page break in *Life* was sought by more than one airline. With typical accuracy, *Life* editors spent weeks in preparation, weighed every word in the captions, caught the correct slant on air transport which will do everyone in the industry much good even though United's route, United's planes and United's personnel crammed the entire 12 pages. Neff carried out perhaps the most single difficult assignment in air transport's hectic history of press agending. Every line of caption and every one of the 32 photos meant hours of work with *Life's* exacting editors.

The pictorial display is noteworthy for (1) focusing attention on air transport's economic struggle leading up to recognition of airlines as public carriers and regulation by the Civil Aeronautics Authority, (2) portraying an airline pilot as a "solid" citizen and a homebody

with normal family life (3) relegating stewardesses to one photograph and one caption (4) giving a break to mechanics, dispatchers, meteorologists, executives and traffic managers who make the routine wheels of air transport go round and fitting them into an industrial background familiar to the thinking senses of the American public.

Pilot Eddie Stewart was the pictorial guinea pig for all airline pilots. Chosen because he is an able and solid individual, he is pictured at home, at play and at work. His co-pilot Bob Greenlee also gets a break. At 28 Stewart has passed his millionth mile, makes two round-trips a week between Newark and Chicago, gets \$8,000 a year, and has an attractive wife who formerly was a UAL stewardess.

Photos are shown of W. A. Patterson, president; Harold Cray, vice president-traffic; Major R. W. Schroeder, vice president-operations; Harry Harrison, chief meteorologist; Ray Gohr, chief dispatcher at Chicago; Henry Ashford "Heavy" Mossman, chief mechanic at Chicago; Steve Stimpson, traffic manager at San Francisco, and a few others.

This is not the only achievement this year for Neff. Soon to be released to thousands of theaters over the country is a Pathe short film subject devoted entirely to United Air Lines. With the company three years, Neff ranks among the tops in airline press relations, knows what the New York papers want, shuns the ballyhoo type of publicity that still gets space in the west, and is probably the best versed publicity man in the industry on the financial and business side of air transport.

TWA TRAFFIC SHIFTS

Harris Beck and A. J. Donahue Resign; Randall Appointed

Three resignations and two appointments have been announced by Transcontinental & Western Air, Inc. The resignations are those of Harris W. Beck, New York regional traffic manager who has been with the company for some years; A. J. Donahue, New York district traffic manager, and H. W. "Bert" Smith, district traffic manager for Hollywood for some years.

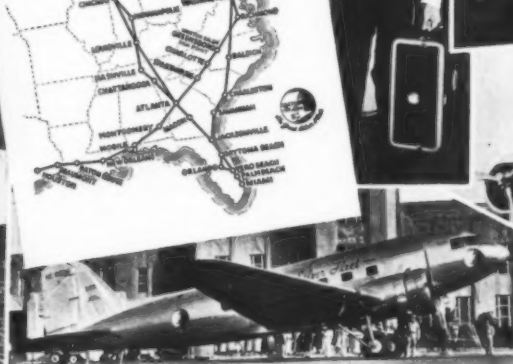
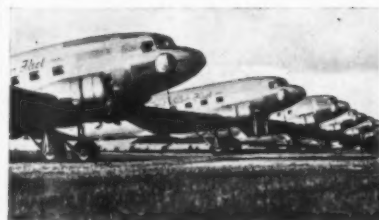
At the same time John B. Walker, vice president in charge of traffic, announced the appointment of I. S. "Stick" Randall, sales and advertising executive, as New York regional manager succeeding Mr. Beck. A captain in the U. S. Army during the World War, Mr. Randall saw service for two years at the front, received a divisional citation, and has spent the remaining years in national advertising and sales work. He assumed office immediately at 60 East 42nd Street, New York City.

John H. Clemson, district traffic agent at Philadelphia, was appointed to the post vacated by Donahue. Mr. Smith's post at Hollywood has not been filled.

N. Y. Departure Record

American Airlines reports that all records for air travel on its ships out of New York were broken Aug. 19 when 470 persons boarded planes at Newark. Old record of 440 was established during Labor Day week-end last year.

★★★★ 4 STAR SERVICE ★★★★★



★ NEW YORK—WASHINGTON

An 80 minute express service that offers commuters between the Nation's financial and Government centers 15 convenient round trips daily and also provides frequent flights to Richmond, Philadelphia and Baltimore.

★ NEW YORK—MIAMI

Giant 21 passenger air liners provide a perfect 8 hours service between these cities. Two round trips daily serve Raleigh, Charleston, Savannah, Jacksonville, and principle Florida points; and provides connections with Pan American Airways.

★ NEW YORK—HOUSTON

There is a daylight express service between these terminals serving New Orleans, Atlanta, Charlotte and Washington. The Piedmont Flyer offers morning and evening service through the piedmont. There is on overnight express service leaving New York at 10:30 P. M. and Houston at 4:45 P. M.

★ CHICAGO—MIAMI

Two round trips daily offer express service to Indianapolis, Louisville, Nashville, Atlanta, Jacksonville and other major middle western and southern cities. At Atlanta connecting flights serve Charlotte and the Piedmont area, New Orleans, Houston, and the deep south.

★★★★ EASTERN Air Lines INC. ★★★★★

United Discontinues Stops at Toledo

United Air Lines at midnight on Aug. 23 discontinued all operations in and out of Toledo, O., until such time as the runways at the Municipal Airport are strengthened sufficiently to hold the company's DC-3 equipment.

A UAL Mainliner recently broke through a runway surface and bogged down while preparing to take off from the Toledo airport. It required 34 minutes to dig the plane out so that it could continue on its flight to Chicago. Another plane, it is said, was able to get up only a 50 mph. speed after a long run, and the pilots stopped the ship instead of attempting to take off. In numerous places on the four 3,800-ft. runways, which were constructed last fall by the WPA, there are surface breaks 3 to 6-in. deep.

W. B. Schmuhl, WPA administrator for Toledo, stated that the runways were built according to specifications prepared by the city engineering department and approved by the Bureau of Air Commerce. Schmuhl said that he had believed the surfaces to be too light when the specifications were first presented to him. The airport section of the Civil Aeronautics Authority, however, when questioned on Aug. 25, said that the plans were satisfactory for DC-3 equipment.

Subgrades 3 in. deeper than the present ones, and 5-6 in. of new stone as a foundation for the asphalt top, will be necessary to put the runways in shape. The WPA is now making certain improvements with \$14,000 which was left over from the original project.

The only other company using the field is Marquette Airlines, which stops on its Detroit-Cincinnati run. This service will not be discontinued. The Toledo personnel of United will remain intact.

TWA Skysleeper Down

Albuquerque, N. M., Aug. 24—A TWA Skysleeper on flight 4-10 (east-bound) made a forced landing on a mesa three or four miles northeast of here shortly after taking off at 2:36 a. m. today. The eight passengers, and crew of three, headed by Harold Hess, pilot, were uninjured. Early reports indicated partial failure of one engine. The ship was damaged considerably.

New Hotel Bureau

Charles S. Nation, Jr., has opened a hotel reservation bureau in the Postal Telegraph concession in the lobby of Chicago Airport's terminal building. Reservations are handled for any hotel in the country without charge to passengers. The service is impartial as to hotels. Mr. Nation is also handling air trip insurance in his bureau.

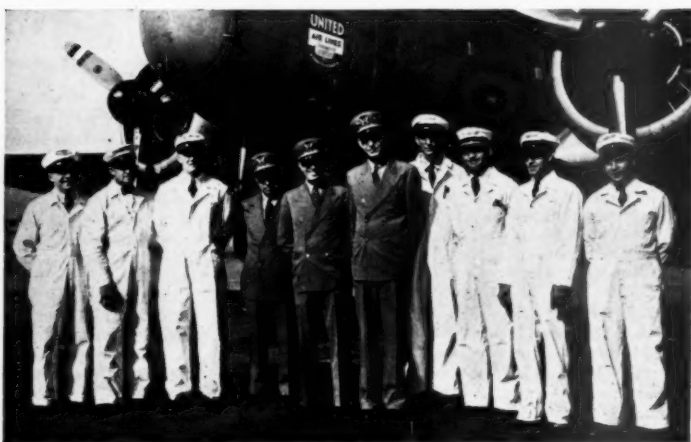
AA Surveys Pilots' Training

Of the 241 pilots flying for American Airlines, 113 received their training in the U. S. Army Air Corps, 12 learned to fly in the Navy, while the Marine Corps and the British Royal Flying Corps each trained one. Many of American's younger pilots, it is reported, are still members of the Army Reserve Officers Corps and take training flights in new Army planes several times a year.

Improves Stewardess Course

R. E. Pfennig, United Air Lines' director of passenger service, has announced that new stewardesses will receive 100 hours' of experience in the company's improved training school at Chicago before going on regular duty. The school, which is under the supervision of a graduate stewardess, employs the facilities of sleeper and lounge planes.

Ten Years of Service on UAL



These ten men have each served ten years with United Air Lines at Cleveland. They were recently presented with diamond-studded service pins. Left to right: Herbert Blossley, assistant crew chief; Merrill Rundle, crew chief; A. W. Van Buren, crew chief; Ralph Grosch, dispatcher; Willard F. Schmitt, assistant station manager; William S. Tuttle, dispatcher; Gust Schmidt, mechanic; John Brotkovich, mechanic; Frank Hayes, mechanic; and F. R. McCardell, mechanic.

Boston-Maine Traffic Up

New traffic records for Boston-Maine and Central Vermont Airways were set on the Aug. 21 week-end, Paul F. Collins, president, reports, with an increase of 24.3% in number of passengers carried Aug. 19 over the figure for the corresponding day last year. A gain of 80.7% was recorded for Aug. 20.

Bermuda Traffic Up

Pan American Airways and Imperial Airways reported unusually heavy traffic between Baltimore, New York and Bermuda in August. During part of the month, the Clippers were averaging 15 to 16 persons each flight.

Pet Fox



J. M. Matthews, Eastern Air Lines field manager at Lovell Field, Chattanooga, is shown with a wild red fox which ran into his automobile recently as he was motoring through North Carolina en route from Macon. The fox was stunned and Matthews picked him up and brought him to a Chattanooga veterinarian who repaired a broken jaw and a crushed leg. The fox is now recuperating in a kennel adjacent to the field hangar. Matthews plans to release the animal at the scene of the accident when the injuries are completely healed. (Photo by John F. Goforth, Chattanooga Free-Press).

UAL Revenues Up

United Air Lines has reported an 18% gain in revenue passenger-miles flown during the first six months of 1938 as against a similar 1937 period. From January through June of this year, the company flew 45,336,693 revenue passenger-miles, compared with 38,459,948 in the first half of 1937. United attributes the gain to heavy advertising in metropolitan newspapers and to the fact that all transcontinental schedules are now operated with Mainliners.

Install Automatic Brakes

In order to prevent landing wheels from spinning during flight and setting up vibration, United Air Lines is installing flight wheel brakes on all DC-3's. The brakes operate automatically when the landing gear has been retracted.

United Fire at Cheyenne

Cheyenne, Aug. 10—Officials are investigating a fire which broke out last night in the paint room of the United Air Lines shops, probably caused by spontaneous combustion. Damage was slight, as the combined forces of city and airport firemen quickly subdued the blaze.

Mexican Airline Named

El Paso, Tex., Aug. 13—Carlos Robles, traffic manager of Lineas Aereas Mineras, has announced that the airline operating between Juarez (across the Rio Grande from this city) and Mexico City henceforth will be named Lamesa Airlines. Planes will leave Juarez Mondays, Wednesdays, and Fridays, and the proposed stop at Leon has been eliminated in favor of Aguascalientes.

Pave Way for International

Phoenix, Ariz., Aug. 23—Officials of International Airlines appearing before the Arizona corporation commission seeking approval of their application for San Diego & Mazatlan, Mexico, service, indicated that they may reach an operating agreement with American Airlines. It was said four other lines, including TWA, withdrew objections for granting a permit to International.

New Canadian Service

Vancouver, B. C., Aug. 5—Ginger Coote Airways yesterday inaugurated air mail service between Vancouver and Fort St. John, carrying 26,000 letters on the first flight.

2 Airlines Burn Up Over Same Ad Copy

New York advertising circles were amused and two airlines were not so amused one day in August when a New York newspaper appeared carrying ads placed by both American and United Air Lines—and both carrying the same slogan.

The United ad placed by the J. Walter Thompson agency featured the line's Mainliners with this slogan in large type: "Good Night New York, Good Morning California."

On another page in the same newspaper Ruthrauff & Ryan agency had placed for American Airlines in almost the same size space an ad with the same slogan, "Good Night New York, Good Morning California."

American Airlines claimed its ad had been prepared three weeks previous to date of publication, while United, through Harold Cray, vice-president, said his company had first used the slogan a year ago last July.

Studies Pollen in Air

Chicago, Aug. 13—O. C. Durham, pollen authority and chief botanist for Abbott Laboratories, left yesterday on United Air Lines for a 3,000-mile air tour of the principal cities between Denver and New York to check the presence of pollen at various altitudes. Durham will also gather data on the upper limits of atmospheric pollen pollution throughout the entire ragweed zone, which is the country east of the Continental Divide. Col. A. D. Tuttle, medical director of United, assisted Durham with the details of the tour.

UNITED'S MAIN LINE...



the pioneer coast-to-coast airway

*United's arrow-straight, mid-continent route is by ten years the oldest airway between the Atlantic and Pacific. It follows the Overland Trail to California, the old Oregon Trail to the Pacific Northwest.

*Selected by the Post Office Department in 1919 as most suitable for a cross-country air route, the Main Line was first to be lighted for night flying... first to have radio range facilities. Over this pioneer airway United now offers the finest in sleeper and day plane service. Only United links the East to all major Pacific Coast cities.

TICKETS: United Offices, Travel Bureaus, Hotels

UNITED AIR LINES

The Main Line Airway

A YEAR 'ROUND ROUTE

United to Call On Wives Who Object to Hubbies' Flying

Chicago, Aug. 22—United Air Lines has just issued a booklet entitled "So You've Never Flown Before!", written from a woman's angle, designed for distribution to wives who object to their husbands taking trips by airplane.

United's district salesmen have assembled lists of several hundred men who claim that their wives keep them on the ground. Not only will these ladies receive booklets, but they will also be interviewed.

The recent 30-day "wives ride free" offer, United states, convinced 90% of the women that air travel was dependable. It was also discovered that many men were "hiding behind petticoats," as many wives expressed surprise that they had been quoted as being opposed to air travel.

Honor UAL Personnel

The following seven employees of United Air Lines have received diamond-studded service pins symbolizing 10 years of continuous service with the company:

William Lawrenz, traveling radio foreman; Capt. A. R. DeGarmo, Oakland; George Fleming, auditor, general office; Capt. Al Gilhousen, Burbank; H. L. Grant, dispatcher, Burbank; Capt. J. R. Smith, Seattle; M. W. Ingham, mechanic, Oakland.

Clipper Schedule Revised

San Francisco, Aug. 13—A temporary change in Pan American Airways' trans-Pacific schedule made necessary by the loss of the Hawaiian Clipper is announced here. Planes will leave San Francisco Sept. 7, 14, 28. Incoming flights arrive Sept. 7, 21, 28, and Oct. 12.



OVERNIGHT COAST-TO-COAST

It's just one cool night's sleep in the only complete through Flagship Skysleepers between New York and Los Angeles. You fly the cool Southern All-Year route through Texas and Washington, D. C. No change of planes. Delicious meals without charge. 10% saving on round-trip flights. American, world's largest airline, serves 57 major cities.

Ask your Travel Agent or Call

AMERICAN AIRLINES Inc.

The American Standard of Service

American Sells Chicago on Flagships



American Airlines capitalized on Chicago's Air Week in mid-August by repeating one of the most successful public education projects hit upon recently by domestic airlines. It re-assembled a Douglas DC-3 Flagship on Chicago's Congress Plaza, just off Michigan Avenue near Grant Park, and thousands of persons went through the ship during the week it was on exhibition. This picture shows a typical line of visitors. American previously had displayed planes in mid-town locations of Los Angeles, Boston, New York (Radio City) and Washington. More than 80,000 Chicagoans went through the plane.

American Shows Ship in Downtown Chicago

Chicago, Aug. 21—Continuing a public relations campaign which has been highly successful in other cities, American Air Lines displayed one of its Douglas flagships in downtown Chicago for one week, ending tonight.

The company participated in Mayor Kelly's New Century Air Week, a phase of a celebration of several months' duration as the city enters its second century as an incorporated city. On Aug. 13 while planes flew over the downtown area, more than 5,000 persons gathered at the Congress St. Plaza for the christening of the plane as "Chicago's New Century," by Miss Dolly Pepin. Fowler W. Barker, secretary of the Air Transport Association of America was the principal speaker.

Analyzes Express Shipments

Just about everything has been carried by air express, according to B. B. Gragg, director of sales for United Air Lines. Gragg, in co-operation with Railway Express Agency, recently compiled a list of the first 10 commodities carried by his company, based on total weight. Here is what he discovered, in order of importance: miscellaneous merchandise, advertising and printing, racing forms and newspapers, films, automotive supplies, cut flowers and perishables, wearing apparel, machinery parts, securities and checks, and electrical supplies. Substantial quantities of phonograph records, silk and fabric samples, cosmetics, drugs, personal baggage and numerous other commodities have also been shipped, Gragg stated.

Injunction Ties Up EAL Mechanics Pact

Miami, Aug. 20—A temporary injunction has been obtained by two Eastern Air Lines mechanics restraining the company and the Air Line Mechanics Association from negotiating a labor agreement, it was revealed today with filing of a bill to make the injunction permanent.

W. M. Hughes and Robert A. Magner who initiated the action, were upheld by Federal Judge Alexander Akerman, of Tampa. The injunction relates that "the complainants have reason to believe there is imminent danger that certain rights of the complainants will be invaded and irreparably damaged if the relief prayed for is not granted, without notice to the defendants." The mechanics association was recognized by the National Labor Relations Board as the bargaining authority for air line mechanics.

S. F. BOWSER & CO., INC., Fort Wayne, Ind., has distributed brochures describing the Junior Xacto Fuel Consumption Meter.

Flying Evangelist

Union Springs, N. Y., Aug. 24—Rev. L. C. Robie of this village, claims to be the only flying evangelist and air pilot in the United States. When he opens his series of fall victory meetings in a few weeks, he will fly from city to city in a three-passenger Waco, given to him by a group of business men. He has constructed an all-metal hangar for the plane on a farm near here.

NEW LOADING AID

Trans-Canada to Use Librascope to Determine Center of Gravity

Winnipeg, Aug. 23—A Librascope balance computer, designed to determine the center of gravity for aircraft while fuel and cargo are being added to the weight, has been installed in all hangars from which Trans-Canada Air Lines will operate in Western Canada.

The pilot, after being given the weight of the cargo to be carried, can, by manipulation of the Librascope's dials, determine exactly where in the plane the load should be placed. A "center of gravity" scale responds if an excess is loaded into one of the four cargo compartments, and indicates how adjustment should be made.

Weight of all fuel, express, mail, passengers and even the retractable landing gear is taken into consideration. How the position of the latter, either retracted or lowered, affects the ship's balance also is indicated.

New Route Proposed

Des Moines, Iowa, Aug. 10—Thomas F. Ryan III, executive vice-president of Mid-Continent Airlines, Inc. (formerly Hanford) has conferred with city officials here concerning the company's plans for a Twin Cities-Des Moines-Kansas City airline. At present Mid-Continent operates between the Twin Cities and Kansas City via Omaha. Mr. Ryan said his company would make application for the new route to the Civil Aeronautics Authority.

Ken Hawkins, formerly employed at Los Angeles Municipal Airport, is now heading the new Western Air College at Alhambra Airport.



CHOOSE THE ROUTE THAT LINDBERGH CHOSE...

TWA is the shortest, fastest coast-to-coast line. On your next trip East or West fly TWA—The Lindbergh Line. No other route offers the marvelous scenic beauty of Boulder Dam, Grand Canyon and the Colorful Southwest Indian Country. Luxurious Skysleepers by day . . . overnight. Skysleepers from New York to California. Meals aloft are free. Always fly TWA . . . Choose the route that Lindbergh chose.

Call your Travel Agent or

TRANSCONTINENTAL & WESTERN AIR, INC.



SACRAMENTO OK's AIRPORT PROGRAM

\$143,000 Bond Issue Voted; Will Be Supplemented by PWA Funds

Sacramento, Cal., Aug. 3—Leading all of the nine issues on the ballot of \$143,000 bond issue for improvement of the



Dudley

wide margin.

The vote makes possible a \$261,755 improvement program for the airport, PWA having approved the difference between \$143,000 and the total.

Leading the fight for approval were City Manager James S. Dean, a friend of the airport, and Arthur S. Dudley, secretary-manager of the Sacramento Chamber of Commerce.

"Sacramento has already expended over a half million dollars of its own money on the local airport," Mr. Dud-



Dean

ley said. "The majority of this new money will be for the purpose of completing the hard surfacing of three major runways, each being approximately 4300-ft. long. The ends of the runways will be concrete in order to facilitate the turning of heavy planes. Modern contact lighting will be installed similar to that at Reno, Salt Lake City and Pendleton.

"Don B. Smith, airport manager, together with our two city engineers, Fred J. Klaus and Charles P. Blood, have just returned from Salt Lake City and Reno where they inspected the airport surfacing there, with the results that the paving work will consist of asphaltic concrete cement.

"Sacramento Airport is not only at the cross roads of air travel on the west coast but is also the first port west of the mountains. It will particularly service transcontinental ships when the San Francisco area is fogged in and when heavy storms in the mountains require a landing in a location where clear weather almost always maintains."

There are six commercial planes and ten private owners of aircraft at Sacramento and about 35 planes are stored on the airport permanently.

New Fairchild Tail Wheel

Hagerstown, Md., Aug. 19—Fairchild Aircraft Corp. has received official approval of a recently engineered steerable tailwheel retaining the full-swiveling feature but proving more efficient than other models. Connected to the rudder pedals with cables, the wheel can be steered easily through an arc of 50 degrees, thus assisting in taxiing, especially in crosswinds where brake application is ordinarily necessary. After the wheel reaches the limit of its steerable arc, it automatically disengages, permitting spot turns. The wheel is available as extra equipment on all 1938 Fairchilds.

National Air Races

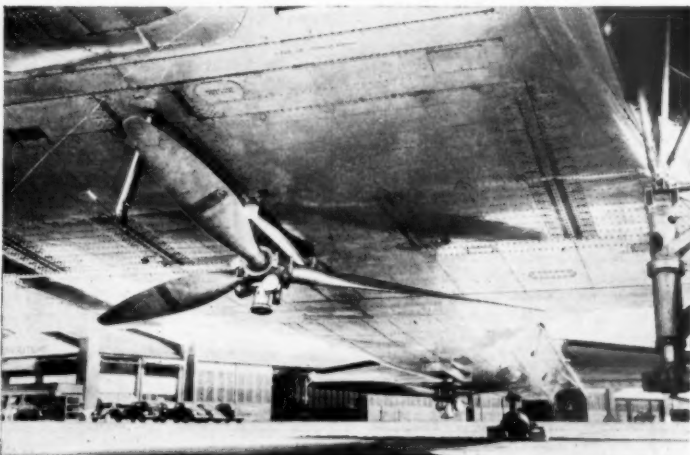
Cleveland, Aug. 20—Participants in competitions during the National Air Races Sept. 3-4-5 will vie for a minimum total of \$102,750, or \$20,000 more than last year's pot, Cliff and Phil Henderson, promoters, announce here. For the first time, the program will be confined to three, instead of four days, with only one closed course event on any one day. Greater emphasis will be placed on parachute jumping "races," stunts, exhibitions and other entertainment features this year.

Biggest event will be the Bendix Trophy race from Los Angeles to Cleveland, with extra awards to those continuing to New York seeking a new Bendix record. A 15-minute stop will be required of all Bendix participants at Cleveland, but no servicing will be permitted. The time will be deducted from the coast to coast total. No pilot may enter both the Thompson and Bendix races.

Those who have signed for the \$30,000 Bendix competition include Frank Fuller, Jacqueline Cochran, Bernarr Macfadden, Bob Perlick, Ross Hadley, Roscoe Turner, John Hinschey, Al Larry, Paul Mantz, Joe Jacobson, and George Armstead. Thompson prize money this year totals \$45,000, with \$18,000 to the winner, plus lap prizes and the \$4,000 Ludlum award for a new course record.

At the airport Count Otto von Hagenburg of Germany, Capt. Alexander Papan of Rumania, Capt. Dick Graniere, Mike Murphy, Hannah Reich of Germany and almost 100 parachute jumpers, are among the long list of attractions.

Transporting Propellers: New Method



A new method of transporting three-bladed propellers has been under test at Wright Field. The propellers are bolted on especially designed racks installed beneath the fuselage of a transport airplane. They can be carried from the supply depot to any desired location without disassembly as has formerly been necessary. Clamps are required instead of straps on the blade braces to prevent loosening by vibration during flight. The new method means a great saving in time. In the experimental installation one rack was set forward and one to the rear of the fuselage, permitting simultaneous carrying of two propellers. Two-bladed propellers are carried within the transport. Air Corps Photo.

C. of C. to Discuss Possible Legislation

The air transport members of the Chamber of Commerce of the United States' transportation committee will attend a transportation conference to be held in Washington Sept. 14-15 for discussion of legislation which it is hoped will be enacted at the next session of Congress.

Although the main topic of discussion at the conference will probably be the railroads, questions dealing with problems of competition among transportation companies and the organization of government agencies dealing with transportation, will also receive attention.

"It is hoped," stated George H. Davis, president of the Chamber, "that, in bringing to bear wide business experience in its many fields upon the transportation situation, the conference may be able to propose helpful measures in the interest of the transportation agencies and of benefit to the public at large. The problem is of widespread national importance."

As part of the movement leading up to the enactment of the Civil Aeronautics Act, the Chamber had gone on record as strongly favoring air transportation legislation.

Flying Trapper Appointed

Edmonton, Alta.—George C. F. Dalziel, well known in the north country as the "flying trapper", has taken over the management of Peace River Airways based here. With two new monoplanes, the company will fly passengers and produce from the Peace River and Fort Vermilion country to Yellowknife in the gold mining center. Dalziel was the first man to run a trapline by airplane, flying from trap to trap and obtaining the best of the season's fur far ahead of all competitors.

Gov. Earle is Asked

About That Vacation (10,000 Miles By Air)

Harrisburg, Pa., Aug. 17—The 10,000 mile vacation trip of Gov. and Mrs. George H. Earle in a Waco plane carrying a State Motor Police sign today aroused State Senator G. Mason Owlett to present a resolution in the senate inquiring as to authority for purchase and sailing of the craft.

The legislator talked much and by taking advantage of numerous questions from the floor succeeded in introducing most of his material into the record. Now, if the senate's committee on aeronautics meets during the special session, it will have to decide what to do about Mr. Owlett's resolution.

Senator Shapiro of Philadelphia hinted that the governor was actually not on a vacation at all but industriously inspecting various national and state police in other lands.

Senator Dent asked whether motor police did not buy motorcycles when they were found preferable to horses, but ruined his case by observing, "The president takes a vacation on a war-boat; why shouldn't the governor go on an airplane?"

Senator Owlett claimed the plane has not been paid for.

Another topic of speculation is whether Capt. A. M. Banks, of the State Motor Police, who is piloting Mr. and Mrs. Earle, is getting paid, and if so by whom? The cost of the trip also is interesting to Harrisburg observers. The party left here Aug. 13 for a tour of Mexico, Guatemala, Costa Rica and Colombia.

WITH UAL 10 YEARS

**Company Reveals 268 Employees
Joined Company More Than
Decade Ago**

United Air Lines recently announced that 268 of its employees have been with the company 10 years or more, and have received diamond-studded 10-year service pins. Most recent 10-year awards were to the following employees: William Lawrenz, traveling radio foreman, communications department; A. R. DeGarmo, captain, Oakland, Calif.; George Fleming, auditor, general office; Al Gilhouse, captain, Burbank; H. L. Grant, dispatcher, Burbank; J. R. Smith, captain, Seattle; M. W. Ingham, mechanic, Oakland; W. E. Jones, mechanic, Cheyenne; Chester Metoyer, janitor, Oakland; Richard J. Davis, watchman, Chicago; J. O. Johnson, captain, Newark; Alice V. Perry, stenographer, Oakland, and Willard Pitt, mechanic, Salt Lake City.

AMERICA'S FIRST AIRCRAFT INSURANCE GROUP

has

**Four Active and Five Inactive Pilots
on its staff**

UNITED STATES AVIATION UNDERWRITERS
INCORPORATED

80 John St., New York, N. Y.

724 So. Spring St., Los Angeles, Calif.

Worthy Gesture



Braniff Airways had a chance recently to do a good turn and the line's generosity brought it national publicity. Lawrence Youngberg, 35, Chicago, wrote Tom E. Braniff for a pass from Chicago to Dallas. Youngberg explained he was poor, lived with his widowed mother, and had been told by doctors that he would lose his eyesight within six months. "I would like to see the great Southwest before I go blind," he wrote. Mr. Braniff granted the pass and Youngberg is shown above in the rare of air hostess Maria Romero as he boarded the plane at Chicago. "It was grand," he said on his return. "I'll never forget it."

Neatest Mechanic



Chicago & Southern Air Lines has decided that America's No. 1 "spic and span" mechanic is James Seybold, foreman of engine overhaul, who leaves his job at the close of each day immaculately clean, and has the further distinction of working throughout an entire week in the same uniform. Seybold holds there's no excuse for any airline mechanic looking like a grease monkey. He is shown here receiving the "Spic and Span trophy" from "Doc" Anderson, superintendent of maintenance. In addition, he was given a special kit of tools as the company's symbol of its appreciation for his outstanding record in setting an example for others. For many years he was associated with Curtiss-Wright Corp., before joining C & S.

CORRIGAN STORY

Miss Corrigan Writes to Mr. Corrigan Reluctantly

The best of the little known facts about Doug Corrigan's rise to fame centers in Washington. It seems that the stenographer who typed the letter revoking Corrigan's license was named Corrigan—Delores Corrigan to be exact. What's more, she didn't like the idea of having to write the letter revoking the license of anyone named Corrigan. So when Doug arrived in Washington to confer with another Irishman called Denis Mulligan, who then was director of the former Bureau of Air Commerce, attractive Miss Corrigan connived to meet Doug and apologized for writing the letter, although it must be said in all justice that Doug didn't know that a fellow Corrigan had actually done the typing. "That's okay," Doug told Delores, "Anybody with the name of Corrigan couldn't go wrong." Miss Corrigan, incidentally, is now a secretary in the office of the general counsel of the CAA.

ELECT MORRIS

L. A. American Legion Prepares for National Meeting in September

Los Angeles, Aug. 14—Aviator's Post 350, American Legion, yesterday elected City Health Commissioner P. G. B. Morris as commander in preparation for the national conclave of ex-service men to be held here next month.

Other officers elected included Ward Williams, first vice-commander; Thomas J. Connelly, second vice-commander; Donald S. Poler, adjutant; Charles Kidder, sergeant-at-arms; Ralph DeRose, chaplain, and George T. Johnson, historian.

Morris, a pioneer aviator, is said to be one of the first flyers to use radio to and from an airplane in flight at Palm Beach, Fla., in February, 1911. He was also one of the founders of the Early Birds.

Call Springfield Session

Springfield, Mass., Aug. 15—The Springfield Aviation Club will sponsor an open town meeting Sept. 19 looking to establishment of a long-time aviation program for the city, Irving D. Marshall, chairman of the airport committee of the club, announced tonight. He recommended that every civic or social organization create an aviation committee or include aviation activities in one existing committee.

Stewardesses in Conclave



UAL Stewardesses in Conclave

United Air Lines' western stewardesses recently had a gathering of their own in San Francisco. The publicity photographer gave up trying to get the girls on the steps before a Mainliner and made this interior shot on a conventional staircase. Reading up, the girls are: Mary LaFranco, Kay Campbell, Echo Jensen, Bee Foltz, Myra French, G. Bea Ludwig, Dorothy Herron, Mabel Madsen, Ann Freeman, Rose Cleary, Vera Smith, Borghild Olson, Aletha Gabie, Flora Fish, Grace Wheeler, Alma Booher.

Congratulations!



John C. Graves, Chicago traffic manager of TWA, congratulates his son, George A. Graves (left) on receiving a commission as lieutenant in the U. S. Marine Corps. Young Graves entered the U. S. Naval Air Station at Pensacola, Fla., Aug. 1, 1937, and was appointed a Naval aviator on July 11, 1938. Before proceeding to his Marine Corps base at Quantico, Va., he spent a month's leave with his parents.

Illinois Tour Ends

Marion, Ill., Aug. 14—More than 20 planes participated in the Illinois air tour which closed at Springfield yesterday with an efficiency contest. The tour, started Aug. 11 at Springfield, included Danville, Joliet, Rockford, Moline, Quincy, East St. Louis, and Marion, where the regular schedule ended. The efficiency flight extended from Marion to Springfield. Pilots included L. F. Zygmunt, H. E. Horner, Henry Bunn, V. L. Roberts, C. E. Stamp, E. Prosperi, R. L. Ellis, T. A. Gannon, Vern Jeter, W. E. Thatcher, C. Fred Smith, C. B. Clark, Mr. and Mrs. Peter Olson, M. L. Schooley, H. J. Grewe, Snyder Moore, J. S. Gilster, Fred Schnitzer, Rome Boekenhoff, F. B. Fleck, O. Midgett. Incoming flyers were greeted by Fred Valentin, airport manager, Craig Isbell, co-manager of Springfield Airport, was a passenger.

Glider Meet Sept. 3

Newark, N. J., Aug. 17—The Associated Gliding Clubs of New Jersey will hold its 5th annual meet Sept. 3-5 at Schley Field, Liberty Corner, N. J., it has been announced. For the first time in the history of the club cross country gliding will be attempted. Planned are spot landings, bomb dropping, endurance, acrobatic flights and airplane tows. Trustees of the Clubs are Franklin Conklin, Jr., Lieut. Richard Aldworth, and Gordon E. Wightman.

CANADA PROMOTES 8

W. A. Bishop, War Ace Who Shot Down 72 Planes, Named Honorary Air Marshal

Ottawa, Aug. 11—Recent promotions of Canadian navy and air force officers include elevation of Air Vice-Marshal W. A. Bishop to honorary air marshal. His advancement was said to be in pursuance of a plan to establish advisory committees for the three defense services. He probably will be a member of the committee charged with Royal Canadian Air Force matters. Marshal Bishop, 44, shot down 72 enemy aircraft in the war and holds the Victoria cross, distinguished service order (and bar), the military cross, distinguished flying cross, and the croix de guerre, with palm. He is a chevalier of the Legion of Honor.

Air Commodore, G. M. Croil, senior air officer, and Air Commodore J. Lindsay Gordon, district officer commanding No. 10 military district at Winnipeg, are advanced to rank of air vice-marshal. Group Captains E. M. Stedman and L. S. Bredner are promoted to air commodore; Wing Commanders W. R. Kenny, A. E. Godfrey, and N. R. Anderson are raised to group captain status.

G. T. Hayes Elected

Oakland, Cal., Aug. 20—George T. Hayes, Boeing School of Aeronautics, was recently elected chairman of the student branch of the Institute of the Aeronautical Sciences. Other officers are Charles F. Goodsole, vice chairman and head of committee on admissions; Harry Scales, recorder and treasurer; Boyd E. Quate and Stewart Doe, members of committee on admissions. Walter F. McGinty, aeronautical engineer and Boeing instructor in design, aerodynamics and materials, is in charge of the group.

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Maintenance Engineers

have a sound background in both mechanics and fundamentals

For they have completed a college course of highest standards that carries them beyond the development and application of mechanical skills. In addition to 2,112 hours of Mechanical Training graduates of this course have had 1,172 hours in fundamental subjects.

As an example:
Parks Maintenance Engineers have had—
300 hours in Metals and Metallurgy
564 hours of Power Plant and Accessory Overhaul and Maintenance
180 hours of Foremanship
168 hours of Radio Theory, Service, Maintenance
150 hours of Airplane Assembly and Alignment
150 hours of Airplane Structure and Hydraulic Systems
138 hours of Machine Shop Practice
126 hours of Power Plant and Accessory Testing and Trouble Shooting
And in addition from 10 to 75 hours each in Mathematics, Physics, Applied Chemistry, Industrial Engineering, Maintenance Management, Civil Air Regulations, Aerodynamics, Public Speaking, Navigation, Meteorology, Inspection and Safety, Letter Writing, Flight, Salesmanship, etc.

Parks Maintenance Engineering graduates are 100% employed in aviation. Additional men will be graduated September 23 and each three months thereafter.
Write, wire or phone your requirements to Oliver L. Parks, President.

PARKS AIR COLLEGE, Inc.
East St. Louis, Illinois

Miller Dickering for Big Foreign Order

Springfield, Mass., Aug. 10—Lincoln L. Keefe, a director of Miller Aircraft Co., said yesterday that a certain foreign government, believed locally to be China, is prepared to place an order for 250 fighting planes with Miller if several financial barriers can be eliminated. Because of the nation's cash shortage it seeks use of notes, which would have to be accepted by an American financial syndicate.

Keefe denied reports here that the company already has orders for 60 planes, but was willing to wager that "within 6 months" they will have made that number of ships.

SEEK AGENCIES

Bureau of Foreign and Domestic Commerce Lists Foreign Firms

The Bureau of Foreign and Domestic Commerce has made the following announcements concerning foreign firms seeking agencies:

An old established firm handling mechanical equipment and acting as shipping, forwarding and insurance agents, located in Antwerp, Belgium, desires agencies for airplanes and aircraft engines.

A London importer and manufacturer of radio and electrical equipment desires an agency for aviation instruments.

An importer located at The Hague, Netherlands, desires to purchase and establish agency connections for aeronautical instruments and accessories.

Names and addresses of the firms mentioned above will be furnished to American companies upon application to the Automotive-Aeronautics Trade Division, Bureau of Foreign and Domestic Commerce, Washington, D.C., direct or through the Bureau's district offices.

Kollsman Instrument Starts 2nd Decade

The Kollsman Instrument Co., which is now starting its second decade, has grown from a small laboratory in an attic workshop where, in 1928, Paul Kollsman, backed by his brother Otto, produced a new altimeter—the first Kollsman instrument.

From the attic laboratory, which was equipped with a second-hand engine lathe, a small drill press and a vacuum pump, Paul Kollsman's company, located in Elmhurst, N. Y., has grown to the place where it now occupies 70,000 sq. ft. of space, has a personnel of over 300, and produces aircraft instruments used in all parts of the world.

The first altimeter produced was followed by the sensitive altimeter, a precision instrument used by Maj. James Doolittle in his blind landing demonstrations in Sept., 1929. Following this, Kollsman moved into a small shop and added five men to the staff. In 1932, a larger shop and 14 more men were necessary to fill Army, Navy and commercial orders. The company moved to its present location early this year.

The executive staff of the company is now composed of Paul Kollsman, president; Otto Kollsman, vice president; Charles H. Colvin, general manager; Walter Angst, vice president and chief of experimental engineering; Victor E. Carbonara, chief of production engineering and factory manager; Wesley C. Bonn, sales manager; Alan G. Binnie, service and foreign sales manager; C. Charles Crockett, manager of west coast office; Miss Gertrude R. Adolph, secretary; Leonard Bolster, accounting, and James Goodrich, purchasing agent.

Certificate & Inspection

The Bureau of Air Commerce announced the following activities of the certificate and inspection division up to Aug. 13:

Approval 2-546 was assigned to the Pasped Skylark, a 2-place open or closed land monoplane powered with a Warner Scarab series 40 engine of 125-hp.

Final approval has been announced for the Piper J3C-50S, the seaplane version of the previously approved J3C-50, a 2-place closed monoplane powered with a Continental A-50 engine.

Type certificate No. 694 has been assigned to the Luscombe Model 8, a 2-place, all metal, closed land monoplane powered with a Continental A-50 engine of 50-hp.

Type Certificates

Piper Cub, model J3F-40, was recently okayed by the Bureau of Air Commerce under approved type certificate 660. This model is the same as the Continental powered J3 under the same approval number except for the Franklin 40-hp. engine installation.

Safety & Planning

The Metcalf Instrument landing system and a report on its feasibility have been completed by the Massachusetts Institute of Technology and was accepted by the Bureau of Air Commerce recently. A report on the project will be prepared at once.

Fairchild Aerial Camera Corp.'s automatic instrument log has been accepted and will probably be installed in the CAA Lockheed for flight testing.

The airport orientator, recently explained in AMERICAN AVIATION, invented by PCA's Horace Stark, has satisfactorily passed flight tests of the BAC-CAA and has been sent to the instrument trainer section at Detroit for use in that section's Stinson plane and Link trainer.

Two demonstrations of radio communication apparatus recently made by the Bureau of Air Commerce involve an improved model of a commercially developed aircraft radio compass which was operated on a flight on the Richmond-Washington airway. Bearings were taken on several types of transmitting stations at various distances under conditions of severe atmospheric disturbance. "Excellent results were obtained," it is announced.

The manufacturer of a new system of radio teletype operated a demonstration circuit with a transmitter at Chicago and a receiving unit at Washington. The BAC reported: "The system appeared to offer possibilities for development of a lightweight receiving unit suitable for aircraft installations. Its most important features seemed to be simplicity and ability to operate under conditions of extreme atmospheric interference."

Menasco Motor Gets ATC

Los Angeles, Aug. 17—The Menasco C6S-4 six-cylinder, air cooled, inverted in-line aircraft engine has been officially rated by the Bureau of Air Commerce at 260-hp., according to Gardner W. Carr, president of the Menasco Manufacturing Co. The approved type certificate 197 issued by the BAC gives the engine 10 additional horsepower over previous models. The 260-hp. rating is at 2,300-rpm. at an altitude of 7,500 ft. at 39.5 manifold pressure. Take-off rating is 290-hp. at 2,400-rpm. with 44 inches of manifold pressure. Manifold pressure at sea level, except for take-off is 40½ ins. The engine has a bore of 4¼-in. and a stroke of 5¼-in. Displacement is 544.9 cu. in., compression ratio is 5.5 to 1, and the supercharged ratio 10.9 to 1.

Distributing Manuals

Air Commerce Manual 04, "Airplane Airworthiness" and Air Commerce Manual 15, "Aircraft Equipment Airworthiness," are being distributed to personnel and manufacturers, the Bureau of Air Commerce announced Aug. 17.

"Airacuda" Deliveries to Start Shortly

Bell Aircraft Co. will commence deliveries on its \$3,168,265 Army order for 13 "Airacuda" fighting planes in November or December. The purchase was announced in AMERICAN AVIATION June 1. Most of the ships will not be delivered until next year, however, so that the earnings will be reflected in the 1939 statement.

Earnings from the manufacture of wings for Navy patrol bombers, being built by the Consolidated Aircraft Corp., will probably be between 25 and 50c a share on 170,000 shares for 1938. The company had net profits of \$43,240, or 25c a share in 1937.

Bell is at present developing a high-speed, single-seat, pursuit plane, powered with an Allison engine, and will probably enter it in the Army's next pursuit competition. Prospects of Army reorders on the "Airacuda" are also considered favorable.

DOUGLAS PROTESTS

Tells NLRB Strikers Not Dismissed for Union Activity

Douglas Aircraft Co. on Aug. 18 protested the National Labor Relations Board's order, issued some months ago, directing it to reinstate, with back pay, 45 sit-down strikers. The case was reopened upon petition by the company. Harry W. Elliott, Los Angeles attorney, appeared for Douglas.

Elliott stated that the men were dismissed because they had seized, damaged or destroyed company property during their strike, and not because of their union activities.

Release Brewster Fighter for Export

Long Island City, N. Y., Aug. 10—The Brewster Model 138 fighter has been released for export, according to Temple N. Joyce, executive vice-president of Brewster Aeroplanes, a division of Brewster Aeronautical Corp. The ship, a two-seat dive bomber built around the Wright Cyclone engine delivering 750-hp. at 15,200-ft., is of all metal monocoque construction with retractable landing gear, which folds into the wing and into the under part of the fuselage.

Details of the plane, announced for the first time, reveal that bombs are carried inside the fuselage, thus increasing speed.

"For export, this plane is designated as a fighter-bomber because, with the bomb dropped, its performance is so high as to make it an excellent two-seat fighter type," Mr. Joyce said. "This airplane has built-in emergency flotation compartments in the wing and built-in fuel tanks. The latter are an integral part of the wing to save weight. This airplane was the first modern conception of a mid-wing monoplane in the two-place military field in this country, and its performance was so outstanding that the company followed this same general wing design in the single seat fighter, 54 of which have just been ordered by the U. S. Navy."

Completing Army's Lockheeds

Los Angeles, Aug. 20—Lockheed Aircraft Corp. announced yesterday that the first of a fleet of 13 transport planes for the Army Air Corps will be test flown next week before being delivered to Dayton. The planes, together with spare parts and special equipment, will cost approximately \$570,913.

Directory of U. S. and Canadian Airlines

The only complete directory of officers and personnel of the air transport industry. Corrected up to July 15.

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EARLE BUILDING

WASHINGTON, D. C.

NOTE: There have been numerous corrections and additions since publication of the directory in the June 1 issue. For accuracy and completeness, order the pocket-size handbook.

President



Wright "Ike" Vermilya, Jr.
Recently elected president of Palm
Beach Aero Corp. at Morrison Field,
West Palm Beach, Fla.

SPERRY NET FOR HALF, \$2,107,780

Earnings of Parent and Wholly
Owned Subsidiaries Equal
to \$1.05 a Share

Report of Sperry Corp., including 100% owned subsidiaries, reveals net profit of \$2,107,780 for the six months ending June 30, 1938, after allowing for depreciation, interest and provision for income, franchise, and capital stock taxes. This is equal to \$1.05 a share on the 2,015,565 shares of \$1 par stock, comparing with net profit for the corresponding period of 1937 of \$1,370,467, or 68¢ a share. The 1937 figure included \$183,795 profit on sale of securities.

As of June 30, current assets were \$13,265,463, including \$4,426,100 cash. Current liabilities were \$4,554,700, comparing with 1937 period figures of \$4,260,143 cash, \$10,760,109 current assets, \$2,921,105 current liabilities. Contracts and work in progress amounted to \$6,560,275, as against \$4,750,368. Total assets were \$17,435,629 as against \$14,741,974; capital surplus was \$4,334,246 against \$4,204,246. Earned surplus is announced as \$6,348,705 as compared with \$5,080,211. There is no funded debt.

Solar Profit Statements

For the 12 weeks to July 23, Solar Aircraft Co. reports a net profit of \$17,317, equivalent to 13¢ a share on 130,110 common shares. For the 4 weeks to July 23 net profit was announced as \$4,117, or 3¢ a common share. In the 8 weeks to June 25 net profit was \$13,200, or 10¢ a share on 129,640 common shares then outstanding.

Wright Leases Plant

Paterson, N. J., Aug. 9—Wright Aeronautical Corp. yesterday leased 39,000 sq. ft. of the Morrison Machine Co. plant here and will use the space for the machining of crankshafts of its Cyclone and Whirlwind engines. It had previously been erroneously reported that Wright would rent 60,000 sq. ft. and manufacture propellers here. This was denied by James R. Morrison, president of the machinery firm.

BUSINESS AND FINANCE

Gillies Corp. Sells 9 Big Grumman

Hicksville, N. Y., Aug. 16—Gillies Aviation Corp., sole sales representative for the Grumman G-21A amphibian, has compiled an unusual sales record since Jan. 1, last, receiving nine orders for the plane from individuals and firms in all parts of the world.

The orders received include: McIntyre Porcupine Mines, Ltd., Toronto, Canada; J. J. Ryan, New York sportsman; Lloyd Aereo Boliviano, Cochabamba, Bolivia; Department of National Defense of the Dominion of Canada; Gar Wood, Detroit, who re-ordered after losing his first G-21A in the Miami hangar fire in April; the Texas Company; K. L. M.; C. V. Whitney, chairman of the board of directors, Pan American Airways, and Nevada Explorations Corp., San Francisco.

The Grumman Aircraft Engineering Corp. is also building 26 of these amphibians for the United States Army and one for the Navy.

Fairchild Aviation Backlog \$1,530,014

Unfilled orders of Fairchild Aviation Corp. on June 30 amounted to \$1,530,014, as compared with \$1,363,738 on Jan. 1 and \$1,341,410 on June 30, 1937, according to James S. Ogsbury, president, who emphasizes in his statement that the company's business is confined to manufacture and sale of aerial cameras, photographic laboratory equipment, radio compasses, navigational and precision instruments, and the making of precise mosaic contour maps from aerial photographs. The company's airplane and engine business was segregated in 1937.

"Business on the books of the camera division assures the normal operation of our Jamaica, L. I., plant during the remainder of 1938 with a fair amount of business carried over into 1939," Mr. Ogsbury said. The June 30 balance sheet revealed net current assets of \$869,504 against current liabilities of \$293,648. On Dec. 31, 1937, current assets were \$695,287 against current liabilities of \$259,185. On Mar. 31, 1938, the outstanding 8% preferred stock of the camera corporation was repurchased.

Consolidated's Taxes Rise

Typical case of what the aircraft manufacturers pay in taxes is shown in a compilation made recently by the Consolidated Aircraft Corporation. During 1937, the company paid \$366,808.22 in taxes, equal to \$3,668.08 per airplane delivered, \$158.72 per shareholder, \$109.43 per employee, and 61¢ per share of common and preferred stock outstanding at the close of that year. Respective figures for 1936 were \$209,163.88, \$2,614.55, \$97.74, \$86.61, and 35¢.

PRODUCTION AND DELIVERIES OF AIRCRAFT ENGINES—BY TYPES JANUARY—JUNE, 1938

H. P.	MILITARY		COMMERCIAL	
	Production Units	Value	Deliveries Units	Value
Under 75	20	\$17,950	632	\$ 194,972
76-125	1	1,100	228	228,549
126-175	1	1,394	66	99,422
176-225	32	72,000	12	26,200
226-300	93	215,114	84	215,368
301-400	84	273,967	43	192,136
401-500	36	164,422	98	440,963
501-600	208	1,097,320	84	515,625
601-700	746	6,899,246	60	430,026
701-Up	746	6,899,246	608	5,356,365
Total 1st 6 mos.	1136	\$8,467,152	1915	\$7,699,626

Above is a breakdown of military and commercial engine production and deliveries for the first six months of 1938.

UAL 2ND QUARTER LOSS IS \$243,031

Deficit Larger Than During Similar
1937 Period; Attributed to
Increased Costs

United Air Lines, despite a 20% gain in passenger revenues during the quarter ended June 30, 1938, showed a loss of \$243,031 for the period, after depreciation, taxes and other charges, compared with \$59,850 for the same quarter of last year and \$667,670 in the quarter ended Mar. 31, 1938.

The company's net loss for the first six months of 1938 amounted to \$910,701, comparing with a \$462,585 loss in the first half of 1937. For the 12 months ended June 30, last, net loss was \$1,202,603, as against loss of \$68,532 for the year ended June 30, 1937.

The larger loss during the second quarter of this year was due to increased costs. United's total operations during the period were 4.3% greater than in a like 1937 period, but operating expenses and taxes were up 13.7%. Per plane-mile operating costs in the second quarter were approximately 71¢, compared with 68¢ for a similar 1937 period and 81¢ in the first three months of 1938.

The company's statement to stockholders reports that its physical facilities and personnel are now adequate to accommodate the increased volume of business anticipated during the next two years. United during the first seven months flew approximately 22% of the revenue passenger-miles of the 16 airlines reporting to the Air Transport Association, compared with about 23% a year ago. In July, the company flew 27%, compared with 28% in July, 1937.

PRATT & WHITNEY AIRCRAFT Division of United Aircraft Corp., East Hartford, Conn., has published a booklet of 24 pages picturing and describing the Series C Twin Wasp (1200-hp.) engine.

M. K. Powers New Adv. Mgr. for G. L. Martin



Marsh K. Powers, former president of Powers-House Co., Cleveland advertising agency, has joined the Glenn L. Martin Co., Baltimore, as assistant to the president in charge of advertising and related matters. He will also handle special assignments for Mr. Martin.

The Powers-House Company, which Powers formed in 1912, was liquidated early this year. From 1917 to 1929, when the Glenn L. Martin Co. was located in Cleveland, Powers served it as advertising counsel.

In addition to his advertising work, Powers has written articles on marketing, advertising, business management and allied topics for business and general magazines. Best known of his articles is the "Old Man Specific" series on advertising copy.

HAMILTON STANDARD PROPELLERS Division of United Aircraft Corp. has released a 20-page, two-color brochure with 12 photographs descriptive of the Hydromatic Quick Feathering propeller. It is available from the company, East Hartford, Conn.

MANUFACTURING

	1938		1937	
	Units	Value	Units	Value
January to June	930	\$ 8,788,802	1098	\$10,088,520
Comm. Airp.	1915	7,699,626	2101	7,886,875
Comm. Eng.		16,488,428		17,965,398
Comm. Total	711	29,158,603	261	12,391,367
Mil. Airp.	1136	8,467,152	931	7,010,046
Mil. Eng.		37,625,755		19,401,413
Total Mil.		\$54,114,183		\$37,386,808
GR. TOTAL				

	1938		1937	
	Units	Value	Units	Value
January to June	960	\$ 9,300,944	1061	\$ 9,989,085
Comm. Airp.	1931	7,756,821	2083	7,797,038
Comm. Eng.		17,057,765		17,786,123
Comm. Total	717	29,285,927	264	12,462,564
Mil. Airp.	1134	8,526,914	936	7,075,309
Mil. Eng.		37,812,841		19,537,873
Total Mil.		\$54,870,606		\$37,323,996
GR. TOTAL				

The above table compares production and delivery of military and commercial airplanes and engines during the first six months of 1938 with a similar 1937 period. Delivery of airplane and engine spare parts amounted to \$18,161,200 for the 1938 period, running total delivery figures to \$73,031,806.

BEECH QUARTER LOSS IS \$31,197

Statement for Period Ending June 30
Announces Total Assets
Are \$804,714

A net loss of \$31,197.65 is reported by Beech Aircraft Corp. for the quarter ending June 30, 1938, comparing with a loss of \$35,364 for the six months ending Mar. 31. Total assets are \$804,714.78, of which \$412,648.60 represents current assets.

A condensed profit and loss statement shows the following figures: Net sales, \$763,545.74; cost of sales, \$695,705.92; gross margin, \$67,839.82; engineering, selling and administrative expense, \$110,334.94; operating loss, \$42,495.12; other income, \$18,466.91; other deductions, \$7,169.44.

Current assets include: cash on hand and in banks, \$76,464.27; accounts and notes receivable, less reserve, \$76,291.16; inventories, \$259,144.05; advances on purchases of materials, \$749.12. Under plant and equipment (at cost) are listed: land, \$18,000; buildings, \$132,000; machinery and equipment, \$129,640.22; less reserve for depreciation of \$28,812.64. Intangible assets are set at \$98,938.11.

Deferred charges comprise: organization, registration and finance expense, \$25,559.51; unexpired insurance, \$1,818.76; other prepaid expense, \$7,918.18, or a total of \$35,296.45.

"Other assets" includes a \$7,004.04 deposit in Barcelona, Spain, with the branch of the Natl. City Bank of N. Y.

Current liabilities follow:
Notes payable, bank, \$32,500; notes payable, commercial, \$7,571.10; accounts payable, trade, \$27,982.88; accrued payroll and expense, \$19,402.02; accrued federal and state taxes, \$10,588.45; mortgage note payable, due Feb. 12, 1939, \$25,000; customers' deposits on sales contracts, \$22,296.50, or a total of \$145,340.95.

Mortgage notes payable, due Feb. 12, 1940, 1941, 1942, (plant purchase, 5%) total \$75,000. Capital stock and surplus entries reveal: common capital stock, par value \$1 a share, authorized 500,000 shares, \$500,000; less unissued, 220,651 shares, \$220,651; outstanding, 279,349 shares, \$279,349. Paid in surplus, \$322,180.47; earned surplus, \$14,042.01.

Operating loss for the first nine months of the fiscal year, 1938, is \$17,155.64. Total capital stock and surplus figure is \$584,373.83.

Beech Production Up

Wichita, Kan., Aug. 15—The plant of Beech Aircraft Corp. is now operating on a two-shift basis filling orders for the foreign market in addition to domestic demands. Three planes will go to the Indian National Airways for service between Karachi and Lahore; one will be flown by the director of civil aviation in Brazil. Shipments will be made to the Philippine Islands and China. Addition of India to Beechcraft buying countries runs the total to 22.

Douglas Meeting Deferred

Los Angeles, Aug. 18—A meeting of Douglas Aircraft Co. directors scheduled for today has been indefinitely postponed, due to absence of several directors. The next regularly scheduled meeting will be in November, and it is likely that any dividend action will be in the form of an end-of-the-year payment. The last dividend paid was 75¢ a share in 1935. Donald Douglas, president, stated at the annual stockholders' meeting last April that the company may be able to pay a dividend before the end of the year.

Try Plane Parachute

San Diego, Aug. 11—A new type parachute for planes, 60-ft. in diameter, was given preliminary tests at Lindbergh Field today. The inventor is James Russell.

A. S. Menasco Resigns

Los Angeles, Aug. 15—A. S. Menasco, vice president and a director of the Menasco Manufacturing Company, has tendered his resignation to the board of directors and plans to take a six months' vacation to recuperate from a recent illness. Gardner W. Carr, president of the company, will assume the sales and production responsibilities formerly handled by Mr. Menasco.

Breeze Sales Rise; Firm Is Preparing New SEC Amendment

Newark, N. J., Aug. 11—Net sales of Breeze Corporations, Inc., for the seven months ended July 31 were \$1,505,727.99, excluding subsidiaries, and \$1,785,913.33 for parent and subsidiaries, according to a letter to stockholders from J. J. Masuch, president. Unfilled orders of the parent on June 30 were \$1,640,441.69, and, including subsidiaries, \$1,771,773.89.

"This corporation is preparing an amendment to file with the Securities & Exchange Commission to conform with its regulations, so that the stop order may be lifted. The listing of the shares of this corporation on the New York Curb Exchange is not affected," the statement reads. The commission on Aug. 5 suspended a registration statement filed by Breeze on Nov. 10, 1936, covering a proposed offering of 201,000 shares.

Shipments for July for the parent corporation were \$215,103.63, and for both parent and subsidiaries they totaled \$258,946.26, comparing with July, 1937, figures of \$91,538.37 and \$142,180.03 respectively. Sales of Breeze Corp. of Great Britain, Ltd., in which the American corporation has a stated 40% interest, are not shown.

Consair to Revamp Plant for New Ships

San Diego, Aug. 11—With the last of the Navy's orders for PBY patrol bombers nearing completion, extensive changes in Consolidated Aircraft Corp.'s plant here are announced for the next six months in preparation for production of a new model. Maj. Reuben H. Fleet, president, said the firm will install eight air driven drop hammers, four of which will be the largest in the industry. Another large hydraulic press, of 2,000 tons capacity, also will be added. The payroll, now totaling 1,400, will be reduced gradually to about 700 during the alterations.

Thirty-two of the PBYs will be flown to Hawaii by patrol squadrons 1, 4, and 18 in relays of 18 on Sept. 6 and early in November, and 16 will be ferried to Panama by squadron 5 on Aug. 31.

Consair's giant 25-ton four-motored, long range patrol bomber on whose engineering the firm and the Navy have spent about \$1,000,000, is awaiting its final trials by a Navy board here late in August. It will compete with another four-motored bomber built by Sikorsky Aircraft Division of United Aircraft Corp. for a five to 10 plane contract.

Jim Griffin Marries

Burbank, Cal., Aug. 12—James V. Griffin, publicity director of Lockheed Aircraft Corp., and Miss Yetta Stiefel, of Burbank, were married here yesterday. Following the ceremony, the couple left for a honeymoon in northern California.

PCA Shows \$7,472 Profit in Quarter

A net profit of \$7,472 after taxes, depreciation and other charges, is reported by Pennsylvania-Central Airlines for the quarter ended June 30, 1938. This compares with a net loss of \$39,309 in the June quarter of last year, and net loss of \$50,578 in the quarter ended Mar. 31, 1938.

The company's net loss for the first six months of this year is \$43,106 after taxes and other charges, compared with \$145,850 in the first half of last year. PCA's operating revenues in the first half increased 17.9%, from \$335,018 last year to \$610,791, and operating expenses decreased 5.4% from \$599,612 to \$566,932.

Penn-Central's total route mileage this year has been increased to 2,102 by the addition of new routes between Washington and Norfolk, Grand Rapids and Chicago, Pittsburgh and Buffalo, Pittsburgh and Baltimore, and Detroit and Sault Ste. Marie.

Loening Bank Survey

Grover Loening, closely identified with aviation development for many years and more recently aeronautical adviser to the U. S. Maritime Commission, is engaged in a comprehensive survey of the entire aviation industry, including air transport, for the Chase National Bank, largest bank in the U. S. The Chase Bank at present has no aviation interests but engaged Mr. Loening to make a thorough study and analysis. Mr. Loening recently returned from Europe where he visited many aircraft plants and aviation centers.

GRUMMAN'S 6-MOS. OUTPUT \$2,126,000

Backlog Announced As \$4,000,000
and Net Profit for Period
Set at \$440,000

Grumman Aircraft Engineering Corp. reveals deliveries totaling \$2,126,000 for the first six months of 1938, and a backlog of about \$4,000,000, comparing with \$3,250,000 on Dec. 31, 1937. It is estimated that net profit for the half year is \$440,000 after reserves for income taxes, or equal to about 95¢ a share on 468,060 capital shares outstanding. In addition, warrants are out for purchase of 40,000 shares at \$9 a share.

A net profit of from \$1.25 to \$1.50 a share for the entire year is seen, with total deliveries likely to reach \$4,000,000. Because of the procedure of recording profits from individual orders only upon completion of the entire contract, all earnings of the year will not appear on the December statement. Net profit in 1937 was \$139,061 or 32¢ a share on the 431,865 shares outstanding on Dec. 31.

All orders now on file are expected to be delivered before Dec. 31, 1938. Eight planes of a recently developed commercial model of the twin-engine amphibian have been delivered.

Letter to Alcor Creditors

Oakland, Cal., Aug. 17—In a letter to creditors of Alcor Aircraft Corp. sent today, J. K. Eakin, assistant treasurer, reports that insurance investigators Aug. 2 completed an investigation into the firm's plane crash recently, and the claim and papers were forwarded to London on Aug. 9. "We assure you that immediately upon receipt of this money a pro rata distribution thereof will be made to all creditors, and we believe this will be sufficient to satisfy all accounts in full."

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LARGEST EXPORT LICENSE GRANTED

French to Purchase \$5,003,000 Planes, Parts; Japan Leads July Buyers

The largest single license to buy aircraft in the United States ever to be issued by the Munitions Board was signed during July, permitting the French government to purchase \$5,003,000.00 of airplanes and parts from American manufacturers. Issuance of the license does not necessarily mean that the planes have already been purchased, but signifies that the French government is authorized to export them when they are ready for delivery. Second largest aircraft license of the month, totaling \$2,454,640.00, was granted to Argentina.

Japan and China led in the actual export of airplanes and parts from the U. S. during July, buying \$1,083,277.00 and \$904,160.04, respectively. China was the leader during June, with Japan in second place. Twenty-three other countries also made purchases in excess of \$10,000 during July. The complete list is as follows:

Japan	\$1,083,277.00
China	904,160.04
Netherlands Indies	842,837.00
Brazil	327,328.00
Russia	313,861.00
Canada	175,568.63
Sweden	173,350.00
Netherlands	158,368.50
Mexico	114,093.00
Estonia	92,480.00
Curacao	88,200.00
Colombia	72,264.20
Siam	69,500.00
Bolivia	61,736.00
New Zealand	60,000.00
France	58,745.00
Turkey	44,618.00
Guatemala	41,250.00
Great Britain	23,687.00
Argentina	19,702.00
Poland	15,775.00
Costa Rica	13,922.00
Peru	12,570.00
Denmark	12,350.00
India	11,000.00

Countries buying smaller amounts included Australia, Honduras, Portugal, Venezuela and Yugoslavia.

Aviation Acquires Stock

Aviation Corp. reports to the Securities & Exchange Commission that on July 22 it acquired 6,675 additional shares of common stock of Aviation Manufacturing Corp. from Lycoming Manufacturing Co. for \$1 a share. On July 29 it acquired 17,528 more shares of such stock from Aviation & Transportation Corp. for \$1 a share, or a total of 24,203 shares. Aviation Corp. now holds 48,406 shares of Aviation Manufacturing Corp. common shares and 30,000 shares of preferred stock, representing all of the issued and outstanding stock of Aviation Manufacturing Corp.

Lockheed's 6 Mos.' Profit Totals \$151,074; Backlog Over \$20,000,000

Lockheed Aircraft Corp. has reported a net profit of \$151,074 for the six months ended June 30, 1938, after interest, depreciation, federal income taxes and amortization of development of \$262,232. This is equal to 23¢ a share on 660,879 shares of \$1 par capital stock, and compares with \$281.563 or 43¢ a share on 659,213 shares during the first six months of 1937.

Design write-off on the Lockheed 14, charged against the first half earnings, amounted to \$239,766, according to Robert E. Gross, president and treasurer of the company. The extensive tooling and rearrangements required to permit high production on the 14 made the first quarter operations unprofitable, he added.

The company's production during the last quarter of 1938 may be interrupted

Major Cover Named Senior V. P. of Douglas



Major Carl Cover, director of sales and chief pilot of the Douglas Aircraft Company, has been appointed senior vice president of the company, succeeding the late Harry H. Wetzel.

Major Cover was born near Roxbury, Pa., and after a high school education followed by some special studies, was employed by the Bethlehem Steel Corp. At the outbreak of the World War, he entered the Army Air Corps at Kelly Field, was later sent to the officers' training school at Berkeley, Cal., and returned to Kelly as a lieutenant. From then until the armistice, he worked as instructor at Brooks Field.

After the War, Major Cover remained with the Air Corps, filling posts of maintenance and engineering responsibilities at Kelly, Langley and Wright Fields. In 1926 he was assigned to the Douglas plant at Santa Monica, as the Air Corps representative on the coast.

In 1929, Major Cover went to Hawaii to assist in the organization of Inter-Island Airways, returning a year later to join the Douglas Company.

According to the Douglas Company, Major Cover has flown everything that Douglas has built. He took the DC-4 on its first flight and tested it for more than a month. The company describes him as "test pilot, salesman, trouble-shooter, adviser, and director of sales." Major Cover is married and lives in Santa Monica with his wife and two children.

FAIRCHILD LEADS

Far Ahead of Other Companies for First 6 Months

Fairchild Aircraft Corp. led the private owner cabin airplane delivery field for the first six months of 1938, according to Aeronautical Chamber of Commerce figures.

The compilation shows the following delivery reports: Fairchild 69, Waco 41, Stinson 38, Monocoupe 7, and Luscombe 1. Cessna and Beechcraft did not furnish reports but their totals were known to be under that of Fairchild. The Fairchild orders received and contracted for between Jan. 1 and Aug. 1 amounted to 88 units, which included one order of 23 from the Dept. of Commerce.

Three Fairchild Warner-powered 24's have been delivered to the Aerial Transport Company of Siam for carrying air mail into the remote northern province of the kingdom. W. M. Marks, Jr., of the Montgomery School of Aviation, Montgomery, Ala., has acquired the Fairchild franchise for that state.

Oil & Mfg. Activities for Canada Promised

Vancouver, B. C., Aug. 21—Ian A. Mackenzie, Dominion minister of national defense, said here that both British Columbia and Alberta are certain to benefit from future aviation orders from Great Britain. Vancouver aircraft plants will probably receive substantial commitments in the near future, and the great oil reservoir in Western Canada will be developed to supply aviation fuel not only for Canada but for a large part of the Empire.

"I am given to understand," the minister declared, "that Turner Valley fuel oil produces the finest grade of aviation gasoline in the world and that factor, I am sure, will play a most important part in the future air defenses of the empire."

Curtiss Plant Opens

Buffalo, N. Y., Aug. 14—The plant of Curtiss Aeroplane Division of Curtiss-Wright Corp. will reopen tomorrow after a shutdown of two weeks with an addition to the payroll of "several hundred men" and an increase in output from 22 to 50 planes a month. Before the factory closed for re-arrangement, total employment was about 2,800. It is said the firm has sufficient orders from the American and French government to assure full production speed for a year.

C. B. Carroll Named

San Diego, Cal., Aug. 20—C. Burr Carroll, Consolidated Aircraft Corp. engineer, has been named project engineer for work on the company's new model "X" plane. No details on the ship are available.

KOLLSMAN INSTRUMENT CO., INC., announces that the latest Kollman Sensitive Altimeter, type 370, and air speed indicator, type 386, feature split cases with rim lighting, to eliminate possibility of case leak at high altitudes, and allow greater visibility of dial graduations when viewed from an extreme angle. Instead of having the conventional case and glass, held by a snap ring, the glass is held in a retaining ring which is secured to the case by screws.

EXPORTS TO LATIN AMERICA INCREASE

1933-1937 Aircraft Purchases Total \$28,875,339; Argentina, Brazil, Mexico Lead Buyers

A total of \$28,875,339 worth of airplanes, engines and spare parts, or 28% of the \$103,667,000.00 exported by the United States during the five years 1933-1937, went to Latin America, according to a recent compilation by the Bureau of Foreign and Domestic Commerce.

Sixty per cent of the \$28,875,339 was purchased by Argentina, Brazil and Mexico, the remaining 40% going to 27 other countries. Exports to Argentina over the five-year period amounted to \$8,272,700, Brazil \$5,145,500, and Mexico \$4,138,100.

Divided by years, the exports to Latin America were as follows:

Year	Value
1933	\$4,615,964
1934	4,997,328
1935	3,472,830
1936	5,253,076
1937	10,536,141

Landplanes, seaplanes and gliders made up the largest item during the five years, totaling \$19,127,000. Parachutes, parts and accessories amounted to \$8,743,970, while engines totaled \$4,375,490.

It is significant to note that 1937 exports to Latin America, which were 36% of the total, were more than double the 1936 purchases. Latin American countries have been buying large amounts of U. S. aircraft products during the first eight months of 1938, so that the year figure may again be doubled.

Other large buyers include Colombia, Peru and Venezuela, who purchased \$3,628,990, \$3,101,060 and \$478,704, respectively, during the five years. Venezuela did not enter the field in a large way until 1937, when its purchases totaled \$412,009.

Besides those mentioned, the following countries were included in the survey: Bolivia, Chile, Costa Rica, Cuba, Dominican Republic, Ecuador, French Guiana, Guatemala, Honduras, Netherlands West Indies, Nicaragua, Panama, Paraguay, Salvador, Surinam, Trinidad & Tobago, British West Indies, Uruguay, British Honduras, Barbados, Jamaica, French West Indies and Haiti.

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Accident Reports

Accident reports on the following non-airline accidents have been released and may be obtained free of charge from the Director of Information, Civil Aeronautics Authority, Washington, D. C.

Lockheed 12A, piloted by Robert Hancock, which fell at Reno, Nev., Feb. 25, 1938. One fatality; four persons injured.

Stinson SR-9C, piloted by Frank Myers Miller, which crashed at Mullet Lake, near Cheboygan, Mich., May 29, 1938. One fatality.

Arrow F, piloted by Robert M. Donley, down at Oklahoma City July 11, 1938. Two fatalities, including the passenger, Thurman Braniff, son of Tom Braniff, president of Braniff Airways.

Travel Air 2000, piloted by Ralph Davis, which crashed at Hoagland, Ind., June 18, 1938. Two fatalities.

Aero Patents

Aug. 16, 1938

2,126,813: Variable Pitch Propeller. Issued to Leland E. Reid, South Pasadena, Cal., assignor to Mildred M. Reid, South Pasadena, Cal.

2,126,935: Direction Maintaining Means for Use on Dirigible Craft. Issued to Gert Zoege von Manteuffel, Berlin-Dahlem, Germany, assignor to Askania-Werke A. G. vormals Centralwerkstatt Dessau and Carl Bamberg-Friedenau, a corporation of Germany.

2,127,264: Propeller Blade. Issued to Glen T. Lampton, Williamsport, Pa., assignor to Aviation Manufacturing Corp., Chicago, Ill., a corporation of Delaware.

2,127,215: Expandable Respiratory Airway. Issued to James T. Gwathmey, New York, N. Y.

2,127,105: Aircraft Sustaining Rotor. Issued to Harris S. Campbell, Willow Grove, Pa., assignor to Autogiro Company of America, Willow Grove, Pa., a corporation of Delaware.

2,126,855: Direction Maintaining Means for Use on Dirigible Craft. Issued to Guido Wunsch, Berlin-Steglitz, and Gert Zoege von Manteuffel, Berlin-Dahlem, Germany, assignors to Askania-Werke A. G. vormals Centralwerkstatt Dessau and Carl Bamberg-Friedenau, a corporation of Germany.

110,876: Design for a Fan Propeller. Issued to Edward S. Preston, Hinsdale, Ill., assignor to Chicago Electric Manufacturing Company, Chicago, Ill., a corporation of Illinois.

Incorporations

New Jersey—The secretary of state has issued incorporation papers to Skyways, Inc., 921 Bergen Ave., Jersey City, capitalization of 100 shares, no par value. Purpose: manufacturer of autos and airplanes. Incorporators are each taking \$5 shares. Francis X. McWilliam and Helen E. Balph, both of Jersey City, and Ella Biehlitz, of Weehawken.

Florida—Lazarus Aircraft, Inc., of Orlando, has received a charter from the secretary of state, 50 shares preferred stock, \$100 par value; 2000 shares common at \$50 par value. Incorporators are W. C. Lazarus, R. T. Anderson, Neil Lord, all directors.

BAC Gets Howard Ships

Chicago, Aug. 21—The first two of four single engine highwing Howard monoplanes ordered by the Bureau of Air Commerce have been delivered to BAC officials here, and will be used to test radio navigation aids on U. S. airways. The planes, designed and built by Ben O. Howard at the Howard Aircraft Corp. plant in Clearing, Ill., near here, have cruising speeds of 190-mph. and a landing speed of 50-mph. Officials said each plane will cost about \$17,000. The Howard firm is said to be the only Illinois aircraft factory in regular operation.

Stock Holdings

Following are stock transactions and holdings of officers, directors and principal stockholders, as reported to the Securities & Exchange Commission July 11-31. All transactions were made in June except those specifically noted. Holdings are as of the end of that month.

Breeze Corps—A. L. Johnston, Jr., director, increased 1,000 common to 1,100.

Brewster Aeronautical Corp.—Raymond Rubicam, director, increased 2,000 to 11,000.

Nicholas Beazley Airplane—Howard Beazley, officer and director, acquired 1 common in December, 1937, and exchanged all of 12,130 shares in January, 1938, for Air Associates, Inc. stock. Russell Nicholas, director, exchanged 11,965 in January, 1938, and 75 in April for stock of Air Associates, Inc., leaving none.

North American Aviation, Inc.—Henry B. duPont, director, acquired 100 common holding that amount.

Pan American Airways Corp.—Cornelius V. Whitney, director (amended report) exchanged 69,716 \$10 par common for 139,432 \$5 par in September, 1937, and acquired 15,000 in March, 1938, holding 154,432. Through C. V. Whitney Trust (property interest not shown) he exchanged 100 \$10 par common in September, 1937, for 200 \$5 par and acquired 1,250 \$5 par in March, 1938, holding 1,450.

United Air Lines Transport Corp.—William A. M. Burden, director, decreased 3,000 common to 2,836.

Western Air Express—James Q. Newton, Jr., director, purchased 6,623 common pursuant to underwriting agreement, holding 9,623.

Shown below are listings of equity holdings of officers, directors and principal stockholders of companies, any of whose securities are registered with the commission:

Holdings Month	
Air Associates, Inc.	
Richard D. Tucker, dir.	0 May '38
Nicholas Beazley Airplane	
(common)	
Russell Nicholas, off.	
& dir.	12,040 July '35
Following are shown equity holdings reported by persons becoming officers, directors or principal stockholders of firms having any securities registered with the commission:	
Curtiss Wright Corp.	
Edward E. Wyman, officer	0 July '38
Class A:	
William F. Goulding, officer	200 June '38
Menasco Manufacturing Co.	
(common)	
Gardner W. Carr, officer	100 June '38
Cyril Chappellet, director	100 June '38
Robert E. Gross, director	50 June '38

CONTRACTS

The Department of Labor announced the following contracts, amounting to \$983,073.65, signed during the week ended Aug. 18 by various government agencies:

W. H. Kieffaber Co., Dayton, Ohio, aircraft hose, Army Air Corps, \$10,794.28.

Communications Development Corp., New York City, radio beacon supervisor and alarm devices, Bureau of Air Commerce, \$10,250.00.

Federal Telegraph Co., Newark, N. J., radiotelephone transmitters, Bureau of Air Commerce, \$21,547.75.

Douglas Aircraft Co., Santa Monica, Calif., airplane and parts, Navy, \$793,000.00.

Wright Aeronautical Corp., Paterson, N. J., aircraft engines, Coast Guard, \$54,597.36.

Sperry Gyroscope Co., Brooklyn, N. Y., aircraft pilots, Navy, \$59,500.00.

Abrams Aerial Survey Corp., Lansing, Mich., aerial surveys, Agriculture, \$33,384.26.

WEEKLY AVIATION AVERAGES (1937-1938)

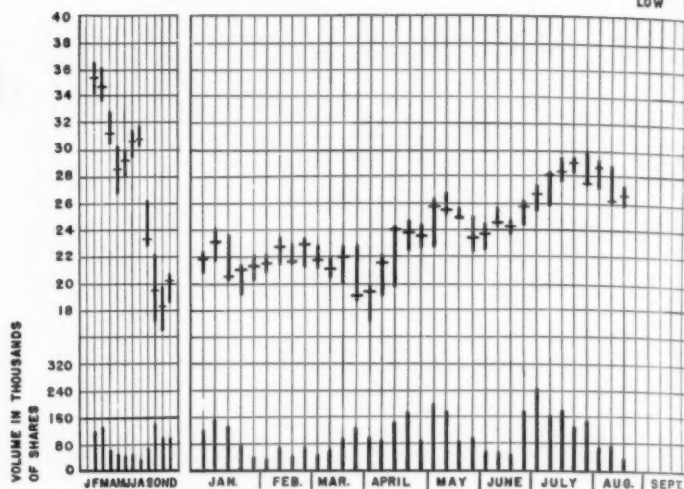


Chart Data Obtained from Wyckoff Associates, Inc., Comments by Philip P. Friedlander

In studying the recent technical behavior of aviation securities, it is interesting to compare such action with the general market. After the Dow Jones Industrial Averages reached 145, they retreated into new low grounds for the move. The set-back found support slightly under 136. In the meantime, the aviation group reacted to 25.94. Recently recovery has taken place in the general market and at this writing the Dow Jones are again close to the old highs, but the aviation averages are trailing behind around the 27

area. Close students would note that despite this, the aviation stocks have retreated on very small volume and that the group movement has been one of backing and filling in the 26-27 area. There is a distinct possibility that the aviations will shortly test their old highs around 30.

The move has been delayed, but one can feel confident that it will come and that holders of these securities are justified in retaining their present long position.

LEADING AVIATION STOCKS

NEW YORK STOCK EXCHANGE

Week Ending Aug. 13				Week Ending Aug. 20			
	High	Low	Net Change	Sales	High	Low	Net Change
Aviation Corp.	4 1/2	4 1/4	- 3/8	12,200	4 1/2	4 1/4	+ 1/8
Bendix Aviation	23 1/4	20 1/2	- 3 1/2	77,700	23 1/2	21 1/2	+ 1 1/2
Boeing Airplane	29	25 1/2	- 3 1/2	16,800	27	25 1/2	+ 3/4
Consolidated Aircraft	16 3/4	14 1/4	- 2 1/2	4,300	15 1/2	14 1/2	+ 1/4
Curtiss-Wright	5 1/4	5	- 1/4	37,400	5 1/4	5	+ 1/4
Curtiss-Wright A	52 1/4	22	- 2	20,000	23 1/4	22 1/2	+ 3/8
Douglas Aircraft	52 1/4	47 1/2	- 4 1/2	14,400	49 1/4	46 1/4	+ 3/4
Ex-Cell-O	16	14 1/4	- 1 1/2	5,500	15 3/4	14 3/4	+ 1/4
Glenn L. Martin	25 3/4	22	- 3 1/4	14,000	23 3/4	22 1/2	+ 1
Natl. Aviation Corp.	9 1/4	8 1/2	- 1/8	1,600	8 3/4	8	+ 1/4
N. American Aviation	10 3/4	9 1/4	- 1 1/2	17,900	9 3/4	9 1/4	+ 1/8
Sperry Corp.	24 3/4	22 1/4	- 2 1/4	13,400	24	22 3/4	+ 1 1/4
Thompson Products	20	17 1/4	- 2 1/2	6,700	19	17 3/4	+ 1
TWA	7	6 1/2	- 1/2	2,200	6 1/2	6	- 1/4
United Air Lines	9 3/4	8 3/4	- 1	15,700	9	8 3/4	+ 1/4
United Aircraft	29 1/4	26 3/4	- 2 1/4	26,500	27 1/4	26 3/4	+ 3/8
Wright Aeronautical	98 1/4	93	- 5 1/4	170	...	...	...

NEW YORK CURB EXCHANGE

Week Ending Aug. 13				Week Ending Aug. 20			
	High	Low	Net Change	Sales	High	Low	Net Change
Aero Supply A	...	...	...	...	...	...	...
Aero Supply B	3 3/4	3 3/4	+ 3/8	900	3 3/4	3 1/4	- 1/2
Air Associates	9 1/4	9 1/4	+ 1/4	200	9 3/4	9 1/4	+ 3/8
American Airlines	15 1/4	14 1/4	...	3,400	15	14 1/4	+ 1/2
Aviation & Transp.	2 1/2	2 1/2	- 1/4	3,100	2 1/2	2 1/4	...
Beech Aircraft	1 1/4	1 1/4	- 1/8	300	1 3/4	1 3/4	+ 1/4
Bell Aircraft	13	12	- 1 1/2	500	12 3/4	12	...
Bellanca Aircraft	7 1/4	6	- 3/4	11,400	6 3/4	6 1/4	- 1/2
Breeze Corps	4 3/4	3 3/4	+ 1/2	2,000	4 1/2	4	- 1/2
Brewster Aero	6	5 1/4	+ 1/2	1,900	5 3/4	5	+ 3/8
Fairchild Aviation	5 3/4	4 3/4	+ 1/2	3,700	5 1/4	5	...
Gruuman Aircraft Eng.	9 1/4	9	- 1/4	700	11 3/4	9	+ 2 3/4
Irving Air Chute	11 3/4	10 3/4	- 1 1/2	700	11	10 3/4	+ 1/8
Lockheed Aircraft	16 1/4	14	- 1 1/2	13,600	14 1/4	14 1/4	+ 3/8
Pan American Airways	16 3/4	15 1/4	- 1 1/2	2,200	15 1/2	14 1/4	- 1 1/4
Penn Central Airlines	7 1/4	7 1/4	...	800	7 1/4	7 1/4	+ 1/4
Seversky Aircraft	2 3/4	2 1/4	- 1/4	2,100	2 1/4	2 1/4	...
United Aircraft war	11 3/4	9	- 2 3/4	5,200	9 3/4	8 3/4	+ 1/2
Waco Aircraft	2 1/2	2 1/2	...	200	...	...	...
Western Air Express	3	2 3/4	- 1/2	700	2 3/4	2 3/4	+ 1/8

New Orleans Chute Firm

New Orleans, Aug. 25—Autochute Corp., believed to be the first parachute factory in the far South, has opened for business at 382 Frenchman St., and will produce a chute invented by Richard H. Hart. Several types are being made for testing by the Navy.

Set Delisting Hearing

A public hearing was scheduled by the Securities & Exchange Commission for Aug. 31 in the Chicago regional office on the application of the Chicago Board of Trade to strike from listing and registration the \$1 par value common stock of Fairchild Engine and Airplane Corp. of New York City.

The Largest Airplane ever Built in America

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powered by **FOUR 1500 H.P.**

WRIGHT Double Row CYCLONES

Six thousand horsepower, consisting of four 1500 H.P. Wright double-row Cyclones, power each of the giant new Boeing 314 Flying Boats now being built for Pan American Airways trans-Atlantic and trans-Pacific routes.

These huge Boeing Clippers, with comfortable sleeping quarters for 40 or day travel accommodations for 74, have an estimated top speed in excess of 200 miles per hour and a cruising range of 4,000 miles.

Pan American Airways will use the new Boeing 314-Type Clippers on their proposed Atlantic route from New York to Europe and on their Pacific routes from California to China and to New Zealand.

The Boeing 314-Type Clippers, each weighing 82,500 lbs., are the largest airplanes ever built in America. It is a fitting tribute that they are equipped with Wright double-row Cyclone engines.



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